

LABOR-HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR 1960

HEARINGS BEFORE THE SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE EIGHTY-SIXTH CONGRESS FIRST SESSION ON **H.R. 6769**

MAKING APPROPRIATIONS FOR THE DEPARTMENTS OF
LABOR AND HEALTH, EDUCATION, AND WELFARE, AND
RELATED AGENCIES, FOR THE FISCAL YEAR ENDING
JUNE 30, 1960, AND FOR OTHER PURPOSES

Printed for the use of the Committee on Appropriations



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UNITED STATES SENATE

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DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR 1960

MONDAY, APRIL 27, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met, at 10 a.m., pursuant to notice, in room F-82, the Capitol, Hon. Lister Hill (chairman of the subcommittee) presiding.

Present: Senators Hill, Chavez, Stennis, Byrd, and Hayden.

DEPARTMENT OF LABOR

OFFICE OF THE SECRETARY

STATEMENT OF HON. JAMES P. MITCHELL, SECRETARY OF LABOR;
ACCOMPANIED BY JAMES T. O'CONNELL, UNDER SECRETARY OF
LABOR; JAMES E. DODSON, ADMINISTRATIVE ASSISTANT SECRE-
TARY; AND V. S. HUDSON, DEPUTY ADMINISTRATIVE ASSISTANT
SECRETARY

PROGRAM AND FINANCIAL NEEDS

Senator HILL. The committee will come to order.

We are honored to have with us this morning the Secretary of Labor, James P. Mitchell.

Mr. Secretary, we shall be pleased to hear from you at this time.

Secretary MITCHELL. Mr. Chairman, I have a prepared statement which I wish to read.

Mr. Chairman and members of the committee, I appreciate this opportunity to present the department's program and financial needs for 1960.

I would like to deviate to some extent from the pattern I have used in the past of talking on each bureau's appropriation estimate. I think that the committee is well aware of the activities of the several bureaus and detailed testimony will be presented by the appropriate bureau head on each appropriation.

Therefore, this presentation is directed toward the major changes between 1959 and 1960.

FINANCIAL ANALYSIS OF THE TOTALS

The total departmental estimate for 1960 is \$571,615,400 as compared to \$1,220,475,015, estimated to be available in 1959. This is a decrease of \$648,859,615.

Of the total 1960 estimate \$45,931,400—about 8 percent—is for the operation of the Department of Labor at the Federal level. The balance is for grants to States, or for benefit payments to unemployed or injured workers covered under various Federal statutes.

DECREASES

A. The expiration of the law providing for temporary unemployment compensation:

By way of explanation, since the submission of these estimates Public Law 86-7 has been enacted providing for the extension of temporary unemployment compensation benefit payments to June 30, and the supplemental appropriation bill now pending in the Senate makes the unexpended balances of 1958 fiscal year appropriation for temporary unemployment compensation available through September 30, 1959.

This will provide funds for both benefit payments and for the liquidation of the program. It is now estimated that there will be unexpended at the close of this program \$142,354,500.

B. An anticipated decrease in unemployment insurance payments to veterans and federal employees:

C. Nonrecurring employee compensation benefit payments:

In arriving at our 1960 budget request we have assumed that supplemental funds for 1959 will be made available to cover—

(a) 1959 Pay Act costs, and

(b) New legislation enacted by the last session of Congress on maritime safety, pension welfare plans disclosure, and permanent unemployment compensation for ex-servicemen.

In addition, there will be a nonrecurring item of employee's compensation benefits to widows of reservists covered under the Federal Employee Compensation Act.

INCREASES

The major dollar changes are as follows:

(a) \$91,805 for increased postal rates.

(b) \$987,500 to annualize the cost of the new legislation enacted by the last session of Congress.

(c) \$13,150,000 for a variety of uncontrollable costs applicable to the State employment security program—this is offset by program decrease of \$10,042,000, leaving a net change of \$3,108,000.

(d) \$252,500 for the cost of converting certain statistics to a new standard industrial code applicable to all Government agencies.

(e) \$132,795 for the extra day of pay in 1960.

(f) \$445,000 for improvement of the Consumer Price Index.

(g) \$886,000 due to the transfer of the labor force data program from the Department of Commerce and for improving the program of determining labor requirements.

The first five items listed are normally considered beyond administrative control since they are caused by some legislative action or are due to a rise in fixed operating costs.

PROPOSED PROGRAM IMPROVEMENTS

I would now like to discuss some major areas of program improvement.

CONSUMER PRICE PROGRAM

A number of factors point to a need for initiating a program for revising the Consumer Price Index to adjust to changes in the pattern of consumer expenditures.

The index is based upon a "market basket" of goods and services bought by moderate income families and measures the changes in the prices of the goods and services that make up that market basket. The composition of the market basket was last fixed on the basis of family spending patterns in 1950. This market basket is now fast becoming out of date.

Spending patterns have changed over the last decade in several ways:

(1) Families are larger. There are more old people and more children. Family needs have changed, with larger families spending more of their income for food and less for other things.

(2) The population has shifted geographically from its 1950 locations. As a whole, the population is 15 percent more than it was in 1950, but some regions have increased 30 percent, and others less than 5 percent.

A higher proportion of our families live in the Southwest and West. Their needs are different from the needs of those living in the North.

(3) Families are moving to the suburbs and are spending less on dress clothes and outside entertainment, and more on houses and gardens.

(4) Family incomes are higher. Even when account is taken of higher prices, real income in 1957 was about one-fourth higher than in 1950. Higher incomes are used to buy more TV's, more cars, more travel, more education, and more medical care.

The smaller proportion of income is spent on food, but food expenditures are themselves going more heavily to frozen foods, meats, and fresh fruits.

EXPENDITURE SURVEY REQUIRED

To bring the market basket up to date, a new family expenditure survey is required. The survey proposed is similar in scope and character to that carried out from 1950 to 1952, which provided the items and quantities for the market basket which currently underlies the CPI.

The revision program would be carried on over a period of 5 years starting with initial planning work in July 1959 and ending with publication of the new index with new weights in January 1964.

The 1950 revision required overall appropriations of over \$4 million. Since that time, of course, there have been sizable increases in personnel costs, transportation costs, and other expenses.

Our tentative estimate is that the new program over the 5-year period will cost about \$4,600,000, on the basis of current costs. The last revision, if conducted at present-day costs, would be considerably more than \$4,600,000.

It is our hope, however, that by utilizing the experience gained during the last survey, and by careful planning, we can keep the cost well below the updated cost of the earlier survey.

IMPROVEMENT OF CURRENT INDEX

In the meantime, it is most desirable that we take measures to improve the current index. Some of the factors which point to such a conclusion are:

The list of 300 commodities and services now priced for the index has remained virtually unchanged for the past decade. In the meantime, the number and variety of goods available in the consumer market has increased greatly.

The creation of new kinds of stores—discount houses and suburban stores—has resulted in a sizable expansion in the numbers and types of sources from which consumers buy.

Since price trends in these outlets are not uniformly reflected by price trends of large department stores and shops in the central cities, it is important that the new outlets be included in the pricing program.

There is greater month to month change in the prices of many commodities than was the case several years ago.

At the present, the Bureau of Labor Statistics collects prices monthly in all the 46 Consumer Price Index cities only for food and fuels. Other commodities are priced largely on a quarterly basis. More pricing should be done on a monthly basis.

LABOR FORCE STATISTICS

It has long been considered unsound to have the responsibility for the employment and unemployment statistics of the Government divided between the Commerce and Labor Departments. There are three major types of government data in the employment, unemployment, and labor force field.

Employment by industry and area have been collected from establishments by the Department of Labor, directly and through the States, under a cooperative program. Unemployment compensation claims are collected from the States by the Department of Labor.

On the other hand, the figures on total unemployment, total employment and labor force contained in the monthly report on the labor force, are collected from households by the Department of Commerce.

As it became obvious that coordination of these programs was essential to make the statistics more useful to the public, a combined release on employment and unemployment was developed by the Departments of Commerce and Labor. The Secretary of Commerce and I have now become convinced that even greater coordination and centralization will be in the public interest.

We, therefore, have reached an agreement, with the concurrence of the Director of the Bureau of the Budget, to give the Department of Labor the full responsibility for planning, administration, and publication of labor force, employment, unemployment statistics, including those obtained from the current population survey.

This arrangement, when confirmed, by appropriation action of the congress, will provide current comprehensive labor force, employment, and unemployment information from a single source, the Department of Labor. The Department will contract with the Census Bureau to collect and tabulate as agent of the Department of Labor, labor force statistics from its current population survey sample of households.

The agreement with the Department of Commerce is consistent with the recommendation of the Commission on Organization of the Executive Branch of the Government in its report to the Congress in 1949.

The centralization of these three types of data in the Department of Labor will provide better integration of the results of the labor force, employment, and unemployment surveys; facilitate analyses which will throw more light on current employment and unemployment problems, and give the public a single point of contact with respect to these data. These new arrangements do not involve any increase in funds for the Government, as a whole.

As a part of the agreement discussed above, the collection and dissemination of construction statistics will be consolidated in the Department of Commerce. All work done by the Department of Labor in this will be transferred to the Department of Commerce.

Senator HAYDEN. Let me ask you with respect to this arrangement about the construction program. Could that be done by the President, or would you submit it as a kind of Hoover Commission program?

Secretary MITCHELL. It can be done administratively within the executive branch.

Regardless of what the executive branch may do, Senator, the Congress would have to take some of the appropriation that is now given to the Department of Commerce and place it in the Department of Labor. This is what we are requesting.

As far as the executive branch is concerned, the matter has been decided upon and when Congress confirms the appropriation, the change will be put into effect.

Senator HILL. In other words, you are asking now that these funds be carried in this bill for the Department of Labor?

Secretary MITCHELL. That is right.

Senator HILL. Rather than put in the Department of Commerce bill for the Department of Commerce?

Secretary MITCHELL. Exactly.

Senator HILL. This plan having been agreed upon and approved by the President, the Chief Executive?

Secretary MITCHELL. Yes, sir.

CHANGE IN FINANCING MEXICAN FARM COMPLIANCE PROGRAM

For 1959, the Congress appropriated \$480,000 for the "compliance activities" of the Mexican farm labor program. Currently, the total cost of promoting compliance and enforcing compliance is financed from two sources:

- (a) Partly by direct appropriation; and
- (b) Partly out of the revolving fund.

It is not practicable to continue this divided financing of this function. Field people working on this phase of the program must perform the variety of functions which are specified on pages 125, 126, of volume 2 of the budget justifications, some of which are promotion functions, some enforcement functions.

For 1960 we are proposing that the total combined function of promoting compliance, investigation for compliance and enforcement, be financed from a single source, by direct appropriation. This would be in keeping with the principle expressed by the House Appropriation Committee in last year's report.

Senator HILL. Speaking of that now, you have funds in the revolving fund?

Secretary MITCHELL. Yes, sir.

DISPOSITION OF REVOLVING FUND

Senator HILL. What would you do with them if you are going to have it all out of appropriations?

Secretary MITCHELL. Mr. Dodson.

Mr. DODSON. The revolving fund is created by the amount we charge the growers for bringing in the Mexican workers. If this expense is defrayed from regular appropriated funds, it would be less of a drain on the revolving fund.

Then if the revolving fund account should show a growth to the point that we can reduce the rate of cost of bringing in Mexican workers, why, that is what we would do. This is a particular administrative type of job that we are doing here, one dealing with compliance work, and it has been the general expression from most people that it should be financed by the Federal Government.

Secretary MITCHELL. I think the point here, Senator, and I think there was some mention of it last year by the House Appropriations Committee, is that it was unfair to ask the farmer to pay for enforcement activities of the Federal Government; that it was fairer to have that out of direct appropriations.

Senator HAYDEN. On the other hand, the farmer does pay for recruiting and bringing them into the country?

Secretary MITCHELL. Yes, sir.

As Mr. Dodson points out, if the revolving fund is relieved of any part of its current expenses and any excess develops then the fund is reduced by lowering the payment that the farmer makes.

Senator HILL. In other words, the Federal Government should only pay for the enforcement of what we might even call policing of the program?

Secretary MITCHELL. That is right.

Senator HILL. The farmer pays all the rest of it?

Secretary MITCHELL. That is right.

STATE EMPLOYMENT SECURITY PROGRAM

GRANTS TO STATES

There are two major changes with respect to this program. One, previously referred to, involves an increase for such items as salary increases for State employees, higher rental costs, and increasing coverage.

The other change involves a decrease of approximately \$10 million to reflect a reduction in claims activities workload due to an improvement in the economic outlook for 1960.

Insured unemployment is estimated to average 2.1 million a week in 1960, as compared to 2.3 million for 1959 and 2.2 for 1958.

We estimate that 2,130,000 employers will be covered in 1960 as compared to 2,068,000 in 1958 because of expanding coverage.

It is anticipated that the states will service 9,500,000 applicants for employment and make 5,493,000 nonagricultural placements.

The statement made to this point was developed several months ago when the estimates were prepared. Since that time there has been improvement in the employment picture and change of activity to some degree in the employment security administration. As the claim load has decreased, employment service activity has increased.

OTHER CHANGES

Small amounts have been included in the estimate to cover:

(a) The Department's participation in the activities of the Career Executive Board.

(b) Cost of entertaining foreign visitors.

(c) Expanded activities of the President's Committee on Physically Handicapped.

(d) More complete union financial reporting under the Taft-Hartley Act, with the necessity to handle periodic peakloads of reports received.

(e) To include Alaska on a comparable basis with other States in the Bureau of Labor Statistics statistical program.

NEW LEGISLATION

WELFARE AND PENSION PLANS

As you know, Congress enacted in the final days of the last session the Welfare and Pension Plans Disclosure Act, Public Law 85-836. This legislation is of far reaching significance. It affects many thousands of employers and the welfare and pension plans covered by the law provide benefits for millions of workers.

The law became effective January 1, 1959. To discharge our responsibilities promptly and effectively requires supplemental funds for the present fiscal year as well as funds for next year.

A supplemental estimate for 1959 of \$450,000 was included in the President's budget for later submission. The estimate for 1960 will place this program on an annual basis.

The total annual cost for this new legislation is estimated at \$895,000.

Briefly, administrators of pension plans and of welfare plans, which include plans providing life insurance, hospitalization, surgical, sickness, accident, unemployment and similar benefits, must file two copies of a description of their plans with the Department of Labor. This must be done by April 1 of this year.

In addition, an annual report covering primarily the financial operations of each plan must be filed within 120 days after the end of the fiscal year of the plan.

When I testified before the Congress on proposed legislation in this area, I indicated that an estimated 250,000 plans would be affected. Our budget estimates are based on this minimum figure.

Much depends upon the manner in which plan administrators elect to file their reports. Many employers have several plans providing different kinds of benefits or covering different groups of employees such as their salaried or hourly rated workers.

FORMS FOR PLAN DESCRIPTIONS AND ANNUAL REPORTS

To assist administrators' the law authorized the Secretary of Labor to prepare and make available forms for the plan descriptions and the annual reports to be used at the discretion of those filing. This we have done. The description form was completed and distributed nationwide before January 1, so that administrators would not be delayed in preparing their submissions.

The annual report form has been completed and is being distributed. In developing these forms we consulted extensively with the groups most vitally concerned, management officials, insurance carriers, bankers, and accountants, labor organizations, and State insurance commissioners.

These discussions were most helpful because the law covers a very broad, complex, and technical area. However, since many of these plans, and the reporting requirements, are so complicated we have received hundreds of inquiries seeking information. We anticipate a continued flow of such requests, especially during the first year of the law's operation.

As you know, the primary purpose of the act is to provide for the disclosure of significant information about welfare and pension plans. The law thus requires me to make the reports available for examination in a public document room of the Department of Labor. Such a document room has been established.

The uncertainties which exist as to the actual number of reports that will be submitted to us likewise applies as well to the extent to which beneficiaries, or the public generally, will ask to look at or obtain copies of the plans on file.

We anticipate, however, that there will be a keen interest in the documents and data in our possession.

Because of the widespread effects of these plans on our economy, the magnitude of the financial transactions involved in them and their prominence in industrial relations, we expect that the Congress, business, and labor organizations and the public generally, will want statistical information on the major characteristics of the plans filed with us and the Department proposes to process the information received in such a way that it will readily lend itself to statistical compilations.

The responsibility for administering the many facets of this new program has been placed in the Bureau of Labor Standards.

PROGRAM PROGRESS

Senator HILL. Mr. Secretary, as you have stated, that is a new program, so to speak, enacted at the end of the last session of Congress. Up to date have you found this moving along satisfactorily? Are you having much difficulty with the program?

Secretary MITCHELL. The number of plans which have been filed have been, up to this point, lower than we had anticipated. We have had somewhere between 135,000 and 150,000 plans filed.

We believe that many have failed to file because of ignorance or for other reasons.

The plans are now coming in and, beginning May 1, there will be required, in addition to the initial filing, an annual report, and the complexities of that we still have not yet wrestled with.

It is still in the formative state. One problem we see is that this law, as passed by Congress, is primarily a self-policing or self-enforcing law. The initial responsibility for determining whether he has to file under the law or not remains with the administrator and he may do so.

So we believe that there are a sizable number of administrators who have not yet filed and who are in effect in violation of the law.

Senator HAYDEN. My recollection was at the time this bill was under discussion there was supposed to be about \$30 billion in these various funds of which \$5 billion were labor organizations and the other \$25 billion employers; is that about right?

Secretary MITCHELL. That is about right. We still have to rest on that estimate. We have done nothing so far in the compilation of data. We have not compiled that data yet; we are just receiving funds.

Senator HAYDEN. If the labor organizations or employers decide they are not going to do anything about it, what can you do?

Secretary MITCHELL. Nothing, unless willful refusal to file is encountered. This, of course, was the weakness of the bill, as we saw it.

Senator HAYDEN. It was not that way when it passed the Senate?

Secretary MITCHELL. No, sir; I know that.

Senator HILL. No, it was not that way when it passed the Senate. You know what happened to it, Mr. Secretary.

Secretary MITCHELL. Yes, sir; very well.

Senator CHAVEZ. We did not recognize it after they got through.

Secretary MITCHELL. As you know, we supported the Senate version of the bill and hoped that that would pass.

Senator HILL. I recall well that you did. I wondered what the effect of the change was that was made after it left the Senate. That is the reason I asked my question.

Secretary MITCHELL. The effect really is to have left the bill in a state where, as I said, it is self-policing, self-enforcing, and we have no way of knowing whether all of the administrators have filed and we have no way of forcing them to file.

LEGISLATIVE RECOMMENDATIONS CONTEMPLATED

Senator HAYDEN. When you get through with the first year's work on this, you will be able to advise the Congress about who did comply and who did not?

Secretary MITCHELL. We hope so, sir. We expect within the next couple of weeks, based on our experience so far with this, to make certain legislative recommendations to the Congress which, of course, would be for the purpose of strengthening the bill.

As you will recall, when the President signed the bill last year, he pointed out many weaknesses and said that he would submit legislation this year, which will be done.

Senator HILL. He cited this very thing, did he not?

Secretary MITCHELL. That is right.

Senator HILL. I am sure he did.

LONGSHORE AND SHIP REPAIR SAFETY

Secretary MITCHELL. Congress also passed late in the last session amendments to the Longshoremen's and Harbor Workers' Compens-

sation Act, Public Law 85-742, dealing with the safety of workers covered under this act.

To discharge our responsibilities under the law, we have submitted a supplemental appropriation estimate of \$240,000 for the fiscal year 1959 which has been approved by the House and by the Senate Committee on Appropriations. To place this supplemental on an annual basis for 1960 an additional amount of \$417,000 will be required.

As you gentlemen know, longshore work is hazardous and many accidents, killing and maiming workers, have occurred over the years. As a matter of fact, the accident frequency rate in this industry is about eight times that experienced in manufacturing.

Although accidents are relatively less frequent for ship repair workers, our information indicates that the rate of disabling injuries in this activity is also well above most industries.

Since the workers in these industries, subject to Federal law, did not come within the jurisdiction of State safety codes, and were thus completely unprotected, the Congress acted to close this unfortunate gap. Under the amended law the Secretary of Labor is authorized to develop, put into effect, and enforce safety regulations designed to reduce the likelihood of crippling accidents and fatalities. We have proceeded to draft tentative safety codes; those for ship repair activities have already been distributed to the industry and unions for their review. A draft of the longshore code is virtually completed.

To assist employers to comply with the safety requirements, as well as to enforce the provisions, inspectors will be stationed at some 17 principal ports along the Atlantic, gulf, and Pacific coasts. Smaller ports will be visited periodically.

Inasmuch as the number of vessels loading or unloading cargo in American ports runs into the thousands annually, our inspectional tasks will be substantial.

These responsibilities, as well as the safety training and consultative activities which the law also authorizes, will be discharged by the Bureau of Labor Standards.

This concludes my statement. I will be glad to answer any questions the committee may have.

ESTIMATE OF GRANTS TO STATES

Senator HILL. Mr. Secretary, let me ask you this: I believe you had \$325,600,000 for grants to States for unemployment compensation and employment service administration; is that correct?

Secretary MITCHELL. I believe so.

Senator HILL. That was estimated to be sufficient to handle a load of 2,700,000 insured unemployment. In the year to date it has averaged only, I believe, 2.1 million. This estimate this year is based on 2.3 million; is that right?

Secretary MITCHELL. 2,100,000.

Senator HILL. I am seeking the estimate for the fiscal year 1960, what is that based on?

Secretary MITCHELL. 2.1 million.

Senator HILL. 2.1 million for this year?

Secretary MITCHELL. Our current estimate for fiscal 1959, which is the fiscal year we are now in, is 2.3 million. We are estimating 2.1 million for the next fiscal year, 1960.

Senator HILL. For the present fiscal year 1959, what was your estimate?

Secretary MITCHELL. 2.3 million is our estimate.

Senator HILL. That is your estimate now, is it not, or is that your estimate for the present fiscal year?

Secretary MITCHELL. If you may recall, and Mr. Dodson can supplement this, our original estimate as you correctly stated, was 2.9 million. There was some discussion in the House and in the Senate on that estimate.

In conference, I believe, another figure was arrived at and there was a general agreement that that estimate was too high and there was a lower estimate arrived at. That lower estimate was, as I recall, 2.2 million. That is the basis on which we have been operating.

Mr. DODSON. That is correct.

Senator HILL. Now, your estimate for the next fiscal year, for which we are now appropriating, 1960, is how much?

Mr. DODSON. 2.1 million.

Secretary MITCHELL. I might point out since the time we prepared this estimate, which involves a long process of consultation with the States, the unemployment picture has looked so much better that the original estimate could well be reduced we believe to 2 million, rather than 2.1 million.

For example, I say in my prepared statement that our nonagricultural placements would be 5,493,000 employment placements for fiscal year 1960.

If the number of placements were to continue at the current rate of March, our nonagricultural placements would run 6½ million instead of 5.4 million.

As the claims load reduces, the employment service activity increases which, of course, we believe is a healthy situation anyway.

Senator HILL. And the least expensive.

Mr. MITCHELL. Mr. Dodson points out that some of our people on the basis of current activity believe the claims load might get down to 1.8 million. I would be perhaps a little conservative and say 2 million.

Senator HILL. Do you think we might have a surplus then in these funds?

Secretary MITCHELL. We might; yes, sir.

Mr. Dodson points out that we may have \$10 million unexpended of this year's appropriation.

Senator HILL. You have \$10 million this year?

Secretary MITCHELL. Yes, sir.

OFFICE OF THE SECRETARY

SALARIES AND EXPENSES

APPROPRIATION ESTIMATE

"For expenses necessary for the Office of the Secretary of Labor (hereafter in this title referred to as the Secretary), including payment in advance when authorized by the Secretary for dues or fees for library membership in organizations whose publications are available to members only or to members at a price lower than to the general public; and purchase of uniforms or allowances therefor, as authorized by the Act of September 1, 1954, as amended (5 U.S.C. 2131); **[\$1,478,000]** \$1,621,000, of which not more than **[\$213,000]**

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\$232,485 shall be for international labor affairs *and not to exceed \$2,000 for official entertainment expenses.*"

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate	\$1, 478, 000	\$1, 621, 000
Proposed for later transmission: For pay act costs authorized by Public Law 85-462	124, 000	0
Total direct appropriation or estimate	1, 602, 000	1, 621, 000

Obligations by activities

Description	1959		1960		Change	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Executive direction	27	\$334, 800	27	\$348, 513	-----	+\$13, 713
2. Program evaluation and coordination	30	293, 950	30	295, 189	-----	+1, 239
3. International labor affairs	23	231, 675	23	232, 485	-----	+810
4. Central information, personnel, library and fiscal services	107	741, 575	107	744, 813	-----	+3, 238
Total direct obligations	187	1, 602, 000	187	1, 621, 000	-----	+19, 000

Obligations by object

	1959	1960	Change
Total number of permanent positions	187	187	None
Average number of all employees	178	178	None
01 Personal services	\$1, 351, 270	\$1, 356, 411	+\$5, 141
02 Travel	31, 500	31, 500	None
03 Transportation of things	700	700	None
04 Communication services	37, 975	39, 500	+1, 525
06 Printing and reproduction	33, 150	33, 150	None
07 Other contractual services	21, 770	33, 770	+12, 000
08 Supplies and materials	34, 015	34, 015	None
09 Equipment	4, 200	4, 200	None
11 Grants, subsidies and contributions	87, 420	87, 754	+334
Total direct obligations	1, 602, 000	1, 621, 000	+19, 000

Summary of changes

Enacted appropriation-----	\$1, 478, 000
Proposed for later transmission for pay act costs (Public Law 85-462)-----	124, 000
Total estimated funds available in 1959-----	1, 602, 000
Estimate for 1960-----	1, 621, 000
Total change-----	+19, 000
Mandatory items:	
Increase in postal rates (Public Law 85-426)-----	+1, 525
Extra day of pay (261 days in 1959 and 262 days in 1960) :	
Personal services-----	+5, 141
Contributions to retirement fund-----	+334
Program increase items:	
For reimbursement to the Civil Service Commission for the Department of Labor share of the cost of the Career Executive Board pursuant to Executive Order 10758, as amended-----	+10, 000
To defray expenses of entertaining foreign visitors-----	+2, 000
Administrative adjustments:	
A total of 9 man-years of employment less than contemplated in the 1959 estimate-----	-57, 700
To provide for:	
(a) 1 GS-10 for the Office of the Under Secretary to serve the Program Planning and Review Committee-----	+6, 050
(b) Adjustment of nonlabor items to 1958 actual costs-----	+30, 325
(c) To provide for the change in average salary rates from the 1959 estimate due to within grade and grade to grade promotions not included in the 1959 estimate--	+21, 325
Net change-----	+19, 000

STATEMENT OF JAMES E. DODSON, ADMINISTRATIVE ASSISTANT SECRETARY, OFFICE OF THE SECRETARY, APPROPRIATION, 1960

The request for 1960 is \$1,621,000. This is an increase of \$143,000 over 1959. Of the increase requested \$124,000 is for pay act costs, \$1,525 is for increased postal rates and \$5,475 is for the extra day of pay. These are all mandatory items and total \$131,000. No additional personnel are requested. Two items totaling \$12,000 require specific comment.

CAREER EXECUTIVE BOARD, \$10,000

The President has issued an Executive Order No. 10758 as amended, entitled: "Establishing a Career Executive Program Within the Civil Service System."

This Executive order provides for a Career Executive Board. The Career Executive Board is composed of members of three agencies of the Government: the Secretary of Labor, the Secretary of Health, Education, and Welfare, and the Chairman of the Civil Service Commission.

The purpose of this Board is to provide a means for people in Government to become recognized career executive public servants and there will be standards established by this Career Executive Board for people who are nominated to become a part of the career executive service.

The main purpose is to elevate the career executives in Government and to make it more attractive for people to become career executives in the Government.

AUTHORITY FOR ENTERTAINMENT EXPENSES, \$2,000

We are requesting \$2,000 for defraying the expenses of entertaining foreign visitors. From time to time there are representatives of foreign governments for whom the Department of Labor is requested to arrange a program to explain our methods of operation and show them how we conduct relations between management and labor. Some of these officials from the foreign gov-

ernments are very high ranking officials of those governments, and it is the custom in those countries when we visit them, to provide certain entertainment to our Government officials and thus, when they come over here we feel that we are obligated to repay to some degree the courtesies shown us.

This has been an expense that has been personally defrayed by persons in the Department and we do not think that we should have to pay for them from our salaries. We are also aware that there are several agencies of the Government that have such authority, and we are requesting authority similar to that which the other agencies of Government have.

With the increased interest of the Secretary of Labor and the Department of Labor and of the Government in such organizations as the International Labor Organization, and in international labor activities generally, it is bound to follow that there will be an increasing number of foreign visitors coming to this country to see the Secretary of Labor.

This covers the new items of increase.

FUNDS REQUESTED IN SECOND SUPPLEMENTAL BILL

Senator HILL. Are there any questions along this line? Let me ask you another question, Mr. Secretary:

I notice in the breakdown of the budget there is \$125,000 in the supplemental, I believe, pending, which will be taken up in the Senate today for the Office of the Secretary; is that correct?

Mr. DODSON. \$125,000; that is correct.

Senator HILL. I am speaking of what is in the budget now.

Mr. DODSON. Yes, sir; that is in the figure we have today.

Senator HILL. In this budget now before us for 1960, there is an additional \$19,000. I am speaking now just for the Office of the Secretary.

Mr. DODSON. That is right.

Senator HILL. Exactly what is this \$19,000 for, in the Office of the Secretary?

Mr. DODSON. There are mandatory increase items for postal rate increases of \$1,525.

The extra days pay is \$5,475, and for reimbursement to the Civil Service Commission for the Department of Labor's share of the cost of career executive board, ten thousand dollars.

The remaining is to defray expenses of entertaining foreign visitors, \$2,000.

Senator HILL. Now, the House in the supplemental denied pay act costs in some departments. What about Labor?

Mr. DODSON. They reduced ours by 10 percent.

Senator HILL. We put it back in the supplemental in the bill which is now before the Senate. Of course, those costs are taken care of all right in this bill for 1960?

Mr. DODSON. Yes.

Senator HILL. Senator Chavez, do you have a question?

PROGRESS OF MEXICAN FARM LABOR PROGRAM

Senator CHAVEZ. Yes, I do.

Folks back home, Mr. Secretary, are interested both ways in this Mexican farm labor program. What has been the history of it, in general? Some complain because there are so many people out of work; when you ask them to work they will not work at stoop labor any more in New Mexico, Arizona, or California.

Would you consider this general program a success?

Secretary MITCHELL. Under Public Law 78, which is the Mexican farm labor program, the Secretary of Labor is directed by Congress to certify that foreign labor, Mexicans, may be used only if the employment of such labor does not adversely affect the employment opportunities of American domestic workers.

So we have the responsibility in the Department, first, of determining that there is no available supply of domestic workers and determining, also, that the farmer in offering employment to the domestic workers is offering employment on the currently prevailing rates of pay and conditions which would exist in the area which is attractive to American farm labor.

It is only then, after we determine that labor is not available under those circumstances, it is only then that we certify that Mexicans may be used.

Generally this system has worked reasonably well. We have had some difficulties in some areas of the country with farmers who have employed Mexicans and in the employment of them, particularly on piece rate systems, have not made the piece rate system produce a reasonable hourly rate, which in effect violates our agreement with the Mexican Government.

We have had to go to compliance enforcement functions.

Senator CHAVEZ. Your functions would be in compliance with those features?

Secretary MITCHELL. That is right, sir.

I would say generally, as far as I know, the relationship of the program with the various farm associations, Mexican farm labor program, has been reasonably good.

Senator CHAVEZ. The complaints that I have had have not come from farmers. I know in our area and in many other areas of the country, the farmer feels that unless he got that type of labor that he could not harvest crops.

Our boys back home will not pull that 25-foot sack of cotton; they will not do it any more. You will find the same thing with the vegetables in Washington, in Oregon, the potatoes and beets in Michigan.

I was wondering, as a whole, as far as Government is concerned, do you feel that it has been a successful program?

Secretary MITCHELL. Yes, sir; particularly, sir, it has, because of the cooperation of the Immigration and Naturalization Service. I think over the last 4 or 5 years we have eliminated almost entirely the illegal entry of Mexicans and that the vast majority of Mexican labor that is now employed comes legally into the country in accordance with the agreement and this has been successful.

Senator CHAVEZ. Thank you.

UNEMPLOYMENT INSURANCE CONTINGENCY FUND

Senator HILL. Mr. Secretary, I would like to go into this unemployment insurance.

As you know, we have had quite a bit of discussion over this in the last session and there has been quite a disagreement between the Senate and the House about it.

You have a contingency fund that you can use if you go beyond a certain point; is that not right?

Secretary MITCHELL. That is right.

Senator HILL. I believe the way the law is written today the Budget Bureau pretty much fixes that breaking point, so to speak; is that true? A point where you can get into the emergency fund?

Secretary MITCHELL. Yes, sir; but we have also felt that it was desirable, and we have done so, to consult with both the House and the Senate Appropriations Committees in arriving at that point.

Mr. Dodson, you might go into detail. You have had these consultations.

Mr. DODSON. I would say this point gets fixed at several different places. At the Budget Bureau when we are originally presenting our estimate, and then as we go through Congress the figure gets changed from time to time.

Very often there is a difference in the economic outlook from the time we first estimate our needs in September and the time we appear in the House in February and in the Senate in April.

Senator HILL. Would there be any way to strengthen your position, your determination, so to speak, to make a better determination of the matter by amendment to the basic law?

Secretary MITCHELL. Sir, I would like to examine that before I answer one way or the other. My offhand impression would be that because of the changes in the economic situation it might be undesirable.

For example, in my prepared statement as you heard, based on our estimates with the States last fall as to what we were going to have in fiscal 1960, we estimated it to be \$2.1 million.

Obviously, because of the upturn in business and downturn in unemployment and the trends, that estimate is high.

Were we to fix a number in law we might have more difficulty.

NEGOTIATIONS WITH THE BUREAU OF THE BUDGET

Mr. DODSON. I think this is an administrative operating problem. We have had some problems with the Budget Bureau in getting the contingency fund released, but we are negotiating with them and I think we are going to negotiate successfully so that something which has been a problem in the past will not be a problem from here on out.

Senator HILL. To be frank, what I had in mind was putting more of the authority in your hands and less in the Budget Bureau's hands.

Now, you can think about that, Mr. Secretary, and inform us if you have any further thought or suggestion that you can make on that.

Mr. DODSON. May we go off the record for a moment, Mr. Chairman?

Senator HILL. Off the record.

(Discussion off the record.)

Senator HILL. Are there any questions, Senator Chavez?

Senator CHAVEZ. No.

Senator HILL. You have brought us a most informative statement, Mr. Secretary. We appreciate it very much and we want to thank you.

Secretary MITCHELL. Thank you, Mr. Chairman.

Senator HILL. If you have any other suggestions, we would like to have it before we close the hearings.

It was nice to have had you.

I will ask General Maas to come around.

General, good morning, sir.

General MAAS. Good morning, Mr. Chairman.

Senator HILL. We are always happy to have you here, sir. I have personal knowledge of the wonderful work you are doing.

PRESIDENT'S COMMITTEE ON EMPLOYMENT OF THE PHYSICALLY HANDICAPPED

STATEMENT OF MAJ. GEN. MELVIN J. MAAS, USMCR, RETIRED; CHAIRMAN

PREPARED STATEMENT

Senator HILL. I not only commend you, sir, and congratulate you, but I am always delighted when you come before this committee.

We will be glad to have you proceed in your own way.

General MAAS. Thank you, sir.

Incidentally, I am looking forward to attending this testimonial luncheon for you, Wednesday.

Senator HILL. Fine.

General MAAS. I don't know whether you know it or not, but I am one of the sponsors of it.

Senator HILL. Thank you, sir.

General MAAS. I have my statement.

Senator HILL. We will have this statement appear in full in the record.

(The statement referred to follows:)

Mr. Chairman, members of the Appropriations Subcommittee. Again it is my pleasure to appear before you to give an account of our stewardship this past year. The committee has available in the current year an estimated \$214,700, and is requesting a modest increase of \$9,772, to \$224,472, for fiscal year 1960.

During the past half decade, as you know, we have gradually increased both our services and our programs until today, we believe, the President's Committee stands erect in a posture which promises continued important contributions to our civilian and defense economy, a posture which is greatly strengthened by the stature of most of the Governors committees cooperating with us in the States and territories.

The increases we ask for today are really not in keeping with the momentum which we would like to maintain. However, they do provide for one additional information specialist to assist us in better serving the States, our members, and cooperating Federal agencies. The other additional funds requested will permit more travel to allow us to again beter serve the States and to keep pace with some of the new requests for speaking engagements coming in from member groups which are showing a special interest in the program such as the National Association of Insurance Agents, B'nai B'rith, women's clubs, and religious groups. They will also provide for routine administrative needs.

At our executive committee meeting last month, a number of items came up which I should like to share with you. I am happy to report that we are making real progress in increasing vending stand opportunities for the blind in Federal buildings and in making it easier for orthopedically handicapped persons to enter public buildings. We hope soon to take a census or survey of handicapped workers in the Federal Government and to strengthen retention rights of Federal workers injured on the job. These four projects are the

responsibility of ad hoc groups chaired by Labor Under Secretary O'Connell, Veterans' Administrator Whittier, Commerce Assistant Secretary Moore, and Civil Service Commission Medical Director Chapin, all being coordinated at the White House level under our advisory council.

Four Federal agencies, which have rendered outstanding services to the handicapped over and above the normal call of duty, will receive the Committee's distinguished service plaque this year including the U.S. Civil Service Commission which received its award at the AFGE banquet last month. The others to be honored are the U.S. Employment Service, the Office of Vocational Rehabilitation, and the Department of the Air Force.

It looks like Mutual of Omaha will produce an outstanding film for us this year at no cost to the Government to supplement the excellent film, "Employees Only," produced for us by Hughes Aircraft and now on the television circuit.

We are still very much interested in the possibility of a national census of the handicapped and are moving toward a few pilot efforts under volunteer direction. Also, we have named an ad hoc committee empowered to review and make recommendations as to whether the President's Committee should openly and publicly become involved in employment of the mentally handicapped. You will recall that this has been a subject of previous discussion at these annual appearances and we have previously advised the Congress through this Committee that we did not feel the time was right to combine the problems of the physically and mentally handicapped under the general responsibility of our Committee. We now propose to reexamine this position and ascertain if it should remain as is, be modified, or changed completely. We will advise you of the decisions reached.

We should be happy to answer any questions.

AMOUNT REQUESTED

General MAAS. I just thought there were a few things I might supplement.

We have available this year some \$214,000. We have asked for a modest \$9,000 increase.

Actually, it will not permit us, Mr. Chairman, to maintain the level we would like to with the increase in pay and increase in cost of everything we must buy, but we feel we are doing all right; we are holding our own.

This will permit us to take on one additional information specialist to help serve better.

For the last 10 or 12 years now I think we really have the country quite well organized. The stature of both the President's Committee and the various governors' committees are sufficient that they command the respect of employers, unions, and the general public.

I honestly believe that this crusade of jobs for the handicapped has become a very definite part of the American life. There is still a great deal to do. We have some specific areas that we are able to do special projects on now because we have a very high level of support from Members of the Cabinet; we have White House support on our advisory council for two very interesting projects. One is in connection with the vending stands for blind operators in Federal buildings.

We have found that the law had not been too well observed. Too many Federal buildings did not have any vending stands in them at all. We are getting that corrected.

STREET LEVEL ENTRANCES FOR BUILDINGS

Another interesting project on which we have made real progress is in connection with street level entrance for people in wheel chairs, especially public buildings which are so very ornamental. We have gone beyond the Government now. All new Federal buildings, in-

cluding the Capitol and New Senate Office Building, do have street level entrances, but we are now working with the American Standards Association. We believe that there is a good prospect that they will adopt as a standard for all buildings that they have at least one street level entrance and an appropriate wider toilet for use of a person in a wheel chair; also, such things as new elevators having the buttons horizontal instead of vertical as many times in tall buildings a person in a wheel chair cannot operate a self-operating elevator.

USE OF FILMS

We have had great success in cooperation with private initiative and with labor unions in making films for us.

We have about 12 films now. One of the most successful was "Employees Only," which was nominated as a documentary, it did not win the Oscar, but it was a runnerup for it. Which is quite unusual for a documentary picture. It is called "Employees Only," made by Hughes Aircraft.

Senator HILL. That was the film you brought to Montgomery, Ala., last fall?

General MAAS. Yes; you saw it.

Senator HILL. I had the pleasure of sitting with you and seeing the film. I thought it was one of the finest films, most informative and challenging, I have ever seen.

General MAAS. It is on the television circuit now. It has received wide acceptance there and enthusiasm everywhere.

I was out in Omaha over the weekend. Mutual of Omaha signed a contract with a production company. They are going to spend between seventy-five and a hundred thousand dollars to produce and distribute another film for the President's Committee without any cost. These are all without any cost to the Government at all.

I would say safely, Mr. Chairman, that for every dollar that the Congress appropriated for the direct operation of the Committee's staff, we get donated to us about an additional \$25.

COOPERATION OF RADIO AND TELEVISION INDUSTRY

The radio and television industry alone has donated during "Employ the Physically Handicapped Week," something like \$4 million in time and talent and free services.

So, the movement has really taken hold.

I do not know of anything where public moneys are spent where they get so much in return for it. Every time we are able to break down barriers and get employers and labor unions to accept the employment of handicapped, these people are taken off welfare rolls, and they very soon become significant taxpayers.

The amount of money paid a day in income taxes by the men and women who have been hired during this 11-year campaign runs into many, many hundreds of millions of dollars, Mr. Chairman, so that I feel that the Congress is well justified in the support it has given this Committee.

I think we can promise you even better results.

If there are any questions, Mr. Chairman, I shall be glad to answer them.

Senator HILL. General, I have had the opportunity, as I say, to see at first hand the work you are doing, your accomplishments. It is indeed a thrilling and inspiring story.

I certainly commend you.

Senator Chavez, do you have any questions?

Senator CHAVEZ. General, I know of the fine work you are doing.

General MAAS. Thank you, Senator.

Senator HILL. General, we certainly appreciate this. Knowing you as I do, I know you will carry on.

General MASS. We will keep on plugging away at it. Thank you very much.

Senator HILL. Thank you.

Now, we are very happy to have Mr. Rothman of the Department of Labor on the items for Office of Solicitor.

Mr. Rothman, we shall be glad to have you proceed in your own way.

OFFICE OF THE SOLICITOR

STATEMENT OF STUART ROTHMAN, OFFICE OF THE SOLICITOR, U.S. DEPARTMENT OF LABOR; ACCOMPANIED BY JOHN J. BABE, HAROLD C. NYSTROM, HERBERT P. MILLER, JAMES R. BEAIRD, WILLARD H. SHAFFER, JAMES E. DODSON, AND V. S. HUDSON

APPROPRIATION ESTIMATE

"For expenses necessary for the Office of the Solicitor, **[\$2,321,000]** \$2,695,000."

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$2, 431, 000	\$2, 695, 000
Proposed for later transmission: For pay act cost authorized by Public Law 85-462.....	212, 000	-----
Total direct appropriation or estimate.....	2, 643, 000	2, 695, 000

Obligations by activity

	1959		1960		Change	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Departmental program activities:						
(a) Litigation.....	36	\$322, 977	36	\$324, 115	-----	\$1, 138
(b) Interpretations and legal advisory services.....	34	304, 272	39	348, 402	5	44, 130
(c) Wage determinations.....	69	508, 537	69	510, 048	-----	1, 511
(d) Legislative advisory service.....	21	180, 656	21	181, 308	-----	652
2. Field legal services.....	139	1, 113, 941	139	1, 117, 758	-----	3, 817
3. Executive direction and management.....	30	212, 617	30	213, 369	-----	752
Total direct obligations.....	329	2, 643, 000	334	2, 695, 000	5	52, 000

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	329	334	5
Average number of all employees.....	323	328	5
01 Personal services.....	\$2, 189, 820	\$2, 233, 790	\$43, 970
02 Travel.....	76, 400	77, 400	1, 000
03 Transportation of things.....	3, 400	3, 450	50
04 Communication services.....	57, 325	59, 325	2, 000
05 Rents and utilities.....	4, 000	4, 000	None
06 Printing and reproduction.....	20, 500	20, 600	100
07 Other contractual services.....	77, 600	78, 200	600
08 Supplies and materials.....	61, 017	61, 267	250
09 Equipment.....	13, 250	14, 500	1, 250
11 Grants, subsidies, and contributions.....	137, 802	140, 508	2, 706
15 Taxes and assessments.....	1, 886	1, 960	74
Total direct obligations.....	2, 643, 000	2, 695, 000	52, 000

Summary of changes

Enacted appropriation.....	\$2, 431, 000
Proposed for later transmission—increased pay costs under Public Law 85-462.....	212, 000
Total estimated funds available in 1959.....	2, 643, 000
Estimate for 1960.....	2, 695, 000
Total change.....	+52, 000
Mandatory items:	
Extra day of pay (261 days in 1959 and 262 days in 1960) :	
Personal services.....	8, 500
Contribution to retirement fund.....	500
Total.....	+9, 000
Program increase items:	
Expansion of interpretation and legal advisory services to cover Welfare and Pension Plan Disclosure Act (Public Law 85-836) and longshoremen's and harborworkers' safety program (Public Law 85-742) (5 positions \$35,470, nonlabor \$7,530) --	+43, 000
Administrative adjustments:	
Reduction of 8 positions (7 man-years of full-time personal services) from the number contemplated in the 1959 estimate..	-62, 688
To provide for the change in average salary rates from the 1959 estimate due to within-grade and grade-to-grade promotions not included in the 1959 estimate.....	+35, 740
Reallocated to nonlabor to more properly reflect the objects of expenditure from which services derived from the working capital fund are financed, and to provide for adjustments in nonlabor costs based on 1958 experience.....	+26, 948
Net change.....	+52, 000

Summary of new positions requested

Activity 1(b) interpretations and legal advisory services:	
1 GS-14 attorney.....	\$11, 357
2 GS-12 attorneys.....	16, 682
1 GS-5 secretary.....	4, 056
1 GS-4 clerk-stenographer.....	3, 765

PREPARED STATEMENT

Mr. ROTHMAN. Thank you, Mr. Chairman.

I have a prepared statement which I would like to put into the record.

Senator HILL. We will put that in the record in full at this point.

(The statement referred to follows:)

STATEMENT OF STUART ROTHMAN, SOLICITOR OF LABOR

I appreciate the privilege of again appearing before this subcommittee and presenting the justification for the 1960 budget estimate of the Office of the Solicitor of Labor.

Our request is for \$2,695,000.

During the past year there have been significant developments in practically all program areas with which the Solicitor's Office is concerned. The most important of the new responsibilities and additional workload has been in the area of interpretations and legal advisory services. This was brought about by the enactment of new legislation requiring employers in the longshore and ship repair industries to use devices and safeguards necessary to assure safety in employment, and the Welfare and Pension Plans Disclosure Act.

The Office of the Solicitor is responsible under the longshore safety program for furnishing the necessary legal services with respect to administrative proceedings to formulate codes of safety practices. In addition to acting as counsel at such hearings, the Office also renders legal assistance in connection with the drafting and publication of the codes and is called upon to interpret the act and advise as to its application in particular situations. The Office also furnishes legal services in connection with enforcement proceedings in cases of safety violations and investigations as to causes of accidents.

Under the Welfare and Pension Plans Disclosure Act, the Secretary of Labor is required to make necessary provisions for receiving, filing, and making available for examination the copies of plan descriptions and annual financial reports which administrators of employee welfare and pension benefit plans are required to file with him. Administrators of the plans may use forms which the Secretary is directed by the act to prepare and make available to them. Plans differing widely in their provisions and applicable to groups of employees in all segments of American industry will be required to file. While the responsibilities of the Department under this act are limited, carrying out a new program of such wide impact necessarily involves the performance of certain legal services, principally of an advisory nature, which the Solicitor's Office is called on to provide.

To meet the needs of these two new programs for legal services it has been necessary to establish a new branch in the Office of the Solicitor, for which an increase of \$43,000 is requested in 1960 which will provide for three attorneys and two stenographic positions.

The increased tempo of the Department's labor standards enforcement program, especially in the field of the Fair Labor Standards Act, produced, in fiscal 1958, the largest contested workload since the enactment of the act in 1938. Actual cases considered for litigation in fiscal 1958 amounted to 6,006 as compared to 3,812 cases considered in 1957. Indications are that cases for consideration will increase further in 1959 and 1960 as the program proceeds. Because of the complexity and variety of coverage and exemption questions now arising under the act the increase is also felt in the appellate litigation activity where greater demands for court review are mounting each year. One of the most significant decisions of the past year was the U.S. Supreme Court's holding that nonprofessional employees of architectural and engineering firms engaged in preparing plans and specifications for projects involving the extension, repair or reconstruction of instrumentalities of commerce are entitled to the benefits of the Fair Labor Standards Act. The decision is particularly important at this time because of the expanded roadbuilding program.

It is anticipated that employees' compensation activities will increase as a result of the enactment of new legislation providing workmen's compensation benefits for civilian employees of nonappropriated funds in the Armed Forces and elsewhere; the providing of workmen's compensation benefits for persons employed under Mutual Security Act contracts; and, the adding of new coverage to the Defense Bases Act and extending the war risks coverage for employees outside the continental United States.

A continuation of the high level of litigation activity involving claims against third parties who negligently caused injury or death of Federal employees under the Federal Employees' Compensation Act is also expected in 1959 and 1960. The amounts obtained through this activity are available as offsets against actual or potential compensation payments. In fiscal year 1958, a net total of \$2,390,874 was collected as compared to \$1,874,972 in fiscal year 1957.

The recent enactment of the Ex-Servicemen's Unemployment Compensation Act of 1958 and new wage policies in the Mexican labor program have created a substantial additional workload in the field of employment security and manpower. The institution of these new programs has already resulted in a marked increase in the need for interpretative and consultative legal services. The additional workload is expected to continue through fiscal year 1960.

An all-time record of 33,283 wage determinations were issued during fiscal year 1958 for federally financed or assisted construction pursuant to the Davis-Bacon and related prevailing wage statutes. This represents an increase of 18 percent over the previous high of 28,065 in fiscal year 1957. With the present acceleration in federally financed and assisted construction resulting from current economic policy and such legislation as the Federal-Aid Highway Act of 1958, the various contracting and financing agencies have estimated that their wage determination requirements will further increase to 40,845 and 41,324 in years 1959 and 1960, respectively. A supplemental appropriation of \$110,000 was added to the 1959 appropriation in recognition of this increased workload. Experience so far this fiscal year closely parallels these estimates. During the first 9 months of fiscal 1959, 25,393 wage determinations were issued as compared to 22,619 for the same period last year.

Complaint cases involving construction labor standards violations also reached a new high of 906 in fiscal 1958, with 859 cases processed to conclusion. So far this year, 1,120 complaint cases have been received with 943 cases processed to conclusion. Restitution totaling \$302,903 was collected during fiscal 1958 for 3,441 underpaid workers. So far this year 2,643 underpaid workers have received \$305,244 in back wages. Penalties totaling \$36,210 were assessed in fiscal 1958 for violations of the 8-hour laws. Last year, ineligibility sanctions were imposed against 72 firms and individuals for construction labor standards violations, twice the number that was debarred the previous year. So far this year, ineligibility sanctions have been applied against 44 firms and individuals.

These activities generally reflect the increased workload of the Solicitor's Office. This increase in all areas resulted from a vigorous but fair approach to the enforcement of the various labor standards laws recognized as so important to the people of this country.

PURPOSE OF REQUEST

Mr. ROTHMAN. I have a few additional observations, Mr. Chairman.

The \$52,000 increase in our requested appropriation for 1960 is for two purposes:

An amount of \$43,000 is needed to meet the added workload created by certain legislation enacted by the 85th Congress.

Amendments to the Longshoremen's and Harbor Workers' Compensation Act require employers in the longshore and ship repair industries to use devices and safeguards necessary to insure safety in equipment. The Office of the Solicitor is responsible for furnishing the necessary legal services with respect to administrative proceedings, assistance in drafting and publishing codes of regulations, and interpretations and enforcement of safety standards and other services of an advisory nature.

The Solicitor's Office is also required to provide the necessary legal services, principally of an advisory nature, for the Department of Labor functions under the Welfare and Pension Plans Disclosure Act.

The balance of the increased request, amounting to \$9,000, is necessitated by an additional extra workday in 1960, and an increase in postal rates.

No increase in funds is requested for functions of the Solicitor's Office in providing the legal services for departmental programs other than the two new ones mentioned.

INCREASE IN WORKLOAD

As shown in the materials submitted to the committee, however, the workload of the office in all these areas is continuing to increase.

Particularly is this true in the areas of labor standards and enforcement, wage determinations, employees' compensation and employment security and manpower.

I believe that a review of our submissions to this committee since 1953 will show how the responsibilities and the volume of work of the Office of the Solicitor have continued to move upward from year to year. This has resulted both from new legislation during this period and from an increase in activity in existing programs such as law enforcement.

With the permission of the committee, Mr. Chairman, I would like to submit for the record two tables. One table is a summary showing the positions provided for by appropriations for fiscal years 1953 through 1959, and requested for 1960, showing that the attorney positions budgeted have changed from 181 positions in 1953 to 167 positions in 1959, and requesting 170 in 1960, or a reduction of 14 positions at the present time.

Senator CHAVEZ. From the 1953 figure?

Mr. ROTHMAN. From 1953, yes.

Senator HILL. A reduction of 14 positions since fiscal 1953?

Mr. ROTHMAN. That is correct.

Senator HILL. Would that include any additional personnel that you would get for 1960, or not, or would that just be up to date?

Mr. ROTHMAN. That would be up to date.

Senator HILL. Through this present fiscal year?

Mr. ROTHMAN. That is correct.

We are asking for three additional attorneys and two clerical helpers.

PERSONNEL FUNDS

Senator HILL. I want you to give us a breakdown of the \$52,000 you are now requesting. How much additional will go to personnel and where the other will go.

I realize the necessity of that by the passage of these two acts at the last session of Congress, the Longshoremen and Harbor Safety Act, and the welfare and pension act.

Tell us how much additional personnel you will have to employ.

Mr. ROTHMAN. The additional amount of \$52,000, Senator, will cover positions for three additional attorneys and two additional clerical persons.

Senator HILL. For the administration of these two new acts passed at the last session of Congress?

Mr. ROTHMAN. Yes, sir.

Senator CHAVEZ. But I think, Mr. Chairman, there is a little better picture than that. In 1953, if I remember correctly, you said you had 181. Then you reduced that to 167 at the present time, but before that you did not have that many.

You are asking for an amount here that will make it 167.

Mr. ROTHMAN. For fiscal 1960 we are asking for an amount that will make it 170 attorney positions.

Senator CHAVEZ. How many did you have in 1959?

Mr. ROTHMAN. 167.

Senator CHAVEZ. What was it in 1958?

Mr. ROTHMAN. In 1958, 163.

Senator CHAVEZ. I misunderstood you. I thought you had reduced it to about 160.

Mr. ROTHMAN. The lowest we have been was in 1954 when we were down to 128 attorneys. We have been slowly building up so that at present we are at 167.

Senator HILL. Just, in a word, to what would you ascribe the basis of that buildup; why did you have to build up?

Of course, that is going back now. Since we are getting this picture, you have built from 128 to 167. What were the main reasons why you had to have that buildup?

Mr. ROTHMAN. While we still have less attorney positions than in 1953, the buildup is attributable to the amendment to the Fair Labor Standards Act that increased the minimum wage from 75 cents to \$1, and the Federal Highway Act substantially increased the work in the Davis-Bacon field.

TABULATION OF LEGISLATION

I would also like to submit for the record a tabulation showing all of the different pieces of legislation that have been enacted since 1953 and which required additional legal services from the Office of the Solicitor.

Each measure itself may not justify additional attorneys for the one piece of legislation. But when they are all taken together, you will see that there has been a substantial increase in the amount of work which has been imposed upon the Department of Labor and upon the Solicitor's Office.

Senator HILL. That may be included in the record.

Mr. ROTHMAN. Thank you, sir.

(The information referred to follows:)

TABULAR SUMMARY SHOWING POSITIONS PROVIDED FOR BY APPROPRIATIONS FOR FISCAL YEARS 1953 THROUGH 1959 AND REQUESTED FOR 1960

	Attorney positions	Other positions	Total
Fiscal year:			
1953.....	181	125	306
1954.....	128	114	242
1955.....	124	114	238
1956 ¹	171	141	312
1957 ²	194	163	362
1958 ³	163	148	311
1959 ⁴	167	162	329
1960 ⁵	170	164	334

¹ Reflects increased staff provided for services required by Fair Labor Standards Act amendments.

² Reflects authorized staff increase for services required by Federal-Aid Highway Act of 1956 (\$140,000 of \$300,000 provided from highway trust fund was held in reserve and not used).

³ Includes staff provided through \$200,000 appropriation from highway trust fund for wage determinations under Federal-Aid Highway Act of 1956.

⁴ Includes staff provided through \$110,000 supplemental appropriation for acceleration of program under Federal-Aid Highway Act of 1956.

⁵ Includes, in addition to request for the number of positions provided in 1959, request for 3 additional attorney positions and 2 clerical positions.

LEGISLATION ENACTED SINCE 1953 REQUIRING ADDITIONAL LEGAL SERVICES FROM
THE OFFICE OF THE SOLICITOR

Congress	Public Law	Subject matter
83d.....	196	Unemployment coverage for seamen.
83d.....	212	Outer Continental Shelf Lands Act.
83d.....	567	Employment Security Administrative Financing Act.
83d.....	767	Extension of unemployment compensation to Federal employees and employers of four or more.
84th.....	56	Alaska unemployment compensation advances.
84th.....	381	Fair Labor Standards Act amendments.
84th.....	627	Federal-Aid Highway Act of 1956.
84th.....	665	Veterans' Reemployment Rights Amendments.
84th.....	803	Longshoremen's and Harbor Workers' Compensation Act amendments.
84th.....	1023	Fair Labor Standards Act amendments (Samoa).
85th.....	231	Fair Labor Standards Act amendments (overseas).
85th.....	441	Temporary Unemployment Compensation Act.
85th.....	477	Amendments to Defense Base and War Hazards Acts.
85th.....	606	Civil Defense Act amendments (determination of prevailing wages for construction).
85th.....	608	Amendments to Defense Base and War Hazards Acts.
85th.....	742	Amendments to Longshoremen's and Harbor Workers' Compensation Act—regulation of safety.
85th.....	750	Fair Labor Standards Act amendments (industry committee procedures).
85th.....	779	Mexican farm labor program extension.
85th.....	791	Fair Labor Standards Act amendment (court records on review).
85th.....	800	Copeland Act amendments.
85th.....	836	Welfare and Pension Plans Disclosure Act.
85th.....	848	Unemployment compensation for ex-servicemen.
86th.....	7	Temporary unemployment compensation extension.

NOTE.—The additional legal services required by the above legislation were in some instances very substantial, in others minimal.

Senator HILL. Are there any questions, Senator Chavez?

Senator CHAVEZ. No, sir.

Senator HILL. We will carry those statements in full in the record, Mr. Rothman.

Thank you, sir. We are very much obliged to you.

Mr. ROTHMAN. Thank you, sir.

Senator HILL. Now, the Bureau of Labor Standards, Mr. Motley.

We are glad to have you, sir. You may proceed in your own way.

BUREAU OF LABOR STANDARDS

STATEMENT OF ARTHUR W. MOTLEY, DIRECTOR; ACCOMPANIED BY NELSON N. BORTZ, ASSOCIATE DIRECTOR; BEATRICE McCONNELL, ASSISTANT DIRECTOR; ROBERT D. GIDEL, CHIEF, DIVISION OF SAFETY STANDARDS AND SERVICES; FRANK W. KUEHL, CHIEF, DIVISION OF WELFARE AND PENSION REPORTS; ROBERT F. VAN ZANT, ADMINISTRATIVE OFFICER; AND JOHN J. GILHOOLEY, ASSISTANT SECRETARY

APPROPRIATION ESTIMATE

"For expenses necessary for the promotion of industrial safety, employment stabilization, and amicable industrial relations for labor and industry; performance of safety functions of the Secretary under the Federal Employees' Compensation Act, as amended (5 U.S.C. 784(c)) and the Longshoremen's and Harbor Workers' Compensation Act, as amended (72 Stat. 835); performance of the functions vested in the Secretary by title I of the Labor-Management Relations Act, 1947 (29 U.S.C. 159 (f) and (g)) and by sections 8 (b) and (c) of the Welfare and Pension Plans Disclosure Act (72 Stat. 997); and not less than [\$201,575] \$224,472 for the work of the President's Committee on National Employ the Physically Handicapped Week, as authorized by the Act of July 11, 1949 (63 Stat. 409): *Provided*, That no part of the appropriation for the Presi-

dent's Committee shall be subject to reduction or transfer to any other department or agency under the provisions of any existing law; including purchase of reports and of material for informational exhibits and expenses of attendance of cooperating officials and consultants at conferences concerned with the work of the Bureau of Labor Standards; **[\$1,004,000]** \$2,680,000."

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$1, 004, 000	\$2, 680, 000
Proposed for later transmission:		
For pay act costs authorized by Public Law 85-462.....	84, 000	-----
For welfare and pension plan administration, Public Law 85-836.....	450, 000	-----
For expanded maritime safety activities under Public Law 85-742.....	240, 000	-----
Total direct appropriation or estimate.....	1, 778, 000	2, 680, 000

Obligations by activities

Description	1959		1960		Change	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Improving State labor legislation.....	21	\$178, 900	21	\$179, 834	-----	+\$934
2. Improving conditions of migratory workers.....	7	64, 100	7	64, 424	-----	+324
3. Reducing industrial accidents.....	107	652, 300	107	1, 070, 947	-----	+418, 647
4. Protecting young workers and advancing their employment opportunities.....	12	93, 300	12	93, 978	-----	+678
5. Promoting employment of the physically handicapped.....	17	214, 700	18	224, 472	+1	+9, 772
6. Registration of labor union data.....	5	30, 100	8	56, 406	+3	+26, 306
7. Registration and disclosure of welfare and pension plan data.....	90	450, 000	90	895, 000	-----	+445, 000
8. Executive direction and management serv- ices.....	12	94, 600	12	94, 939	-----	+339
Total direct obligations.....	271	1, 778, 000	275	2, 680, 000	+4	+902, 000

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	271	275	+4
Average number of all employees.....	167	285	+118
01 Personal services.....	\$1, 209, 700	\$1, 856, 000	+\$646, 300
02 Travel.....	82, 800	100, 400	+17, 600
03 Transportation of things.....	7, 300	8, 300	+1, 000
04 Communication services.....	46, 100	62, 200	+16, 100
04 Rents and utility services.....	9, 900	24, 200	+14, 300
06 Printing and reproduction.....	179, 600	186, 600	+7, 000
07 Other contractual services.....	70, 500	277, 100	+206, 600
08 Supplies and materials.....	39, 700	43, 300	+3, 600
09 Equipment.....	59, 300	14, 100	-45, 200
11 Grants, subsidies, and contributions.....	70, 100	104, 500	+34, 400
15 Taxes and assessments.....	3, 000	3, 300	+300
Total obligations.....	1, 778, 000	2, 680, 000	+902, 000

Summary of changes

Enacted appropriation-----	\$1, 004, 000
Proposed for later transmission:	
For pay act costs authorized by Public Law 85-462-----	84, 000
For welfare and pension plan administration, Public Law 85-836--	450, 000
For expanded maritime safety activities under Public Law 85-742-----	240, 000
Total estimated funds available in 1959-----	1, 778, 000
Estimate for 1960-----	2, 680, 000
Total change-----	+902, 000
Mandatory items:	
Increase in postal rates (Public Law 85-426)-----	+1, 600
Annualization of 1959 base:	
For 71 positions for expanded safety activities under amend-	
ments to sec. 41 of the Longshoremen's and Harbor Work-	
ers' Compensation Act (Public Law 85-742)-----	+417, 000
For 90 positions for registration and disclosure of welfare	
and pension plan data (Public Law 85-836)-----	+445, 000
Extra day of pay (261 days in 1959 and 262 days in 1960):	
Personal services-----	+3, 200
Retirement-----	+200
Program increase items:	
To provide more effective services by the President's Committee	
on Employment of the Physically Handicapped (1 position,	
\$4,900; nonlabor, \$4,100)-----	+9, 000
To provide staff to handle workload caused by revision of the	
reporting form required by secs. 9 (f) and (g) of the Labor-	
Management Relations Act (3 positions, \$19,150; nonlabor,	
\$6,850)-----	+26, 000
Administrative adjustments:	
Reduction of 5 positions (5 man-years of full-time personal serv-	
ices) from the number in the 1959 estimate-----	-29, 400
Reallocated for the following purposes:	
To provide for 2 new positions, at GS-5 and GS-9, in lieu of	
1 GS-12 eliminated in activity 1-----	+9, 000
To provide for the change in average salary rates from the	
1959 estimate due to within-grade promotions and grade	
promotions not included in the 1959 estimate-----	+4, 900
To provide for salary increases for engineer positions as au-	
thorized by Public Law 763, 83d Cong-----	+5, 800
To more properly reflect the objects of expenditure from	
which services derived from the working capital fund	
are financed-----	+9, 700
Net change-----	+902, 000

Summary of new positions requested

For stepped-up work of the President's Committee on Employment of the Physically Handicapped:	
1 GS-7 information assistant-----	\$4, 992
For increased workload under revised reporting form required by sections 9 (f) and (g) of the Labor-Management Relations Act:	
1 GS-9 accountant -----	5, 390
1 GS-4 examiner -----	3, 765
1 GS-3 typist -----	3, 515

PREPARED STATEMENT

Mr. MOTLEY. My name is Arthur W. Motley, Director of the Bureau of Labor Standards.

With your permission, Senator, we would like to incorporate in the record our prepared statement.

Senator CHAVEZ (presiding). You do that and proceed in your own way.

(The statement referred to follows:)

STATEMENT OF ARTHUR W. MOTLEY, DIRECTOR, BUREAU OF LABOR STANDARDS

The Bureau of Labor Standards is requesting an appropriation of \$2,455,528 for fiscal year 1960. This excludes the amounts available for the President's Committee on Employment of the Physically Handicapped, and is an increase of \$892,228 over the amount anticipated to be available for the current year.

The Bureau's activities include the promotion of occupational safety, technical advice to State labor departments on labor law and administration, improved conditions for migratory agricultural workers, protection of young workers, and the handling of union organizational and financial reports. In addition, as a result of 1958 legislation, the Bureau's estimate for 1960 includes funds for expanded safety activities under amendments to section 41 of the Longshoremen's and Harbor Workers' Compensation Act and for new activities required by the Welfare and Pension Plans Disclosure Act.

As these laws were passed in the closing days of the 85th Congress, it was not possible to obtain additional funds. However, it was indicated by discussion in the Senate, that we should finance necessary operations from available funds until the new Congress convened. In the maritime safety field, existing staff was diverted from regular activities to develop drafts of proposed ship-repair and stevedore safety codes. No additional activities have been carried out under the legislation.

Because of the effective date of January 1, 1959, for filings under the Welfare and Pension Plans Disclosure Act, and the necessity to prepare forms for use by plan administrators, purchase equipment, and recruit initial staff, the Bureau is operating under an accelerated apportionment, pending enactment of a 1959 supplemental appropriation.

LONGSHOREMEN'S AND HARBOR WORKERS' SAFETY

Public Law 85-742, approved August 23, 1958, is constructive legislation which is designed to reduce the number of injuries which have occurred in the stevedoring and ship-repair industries.

Under this law, the Secretary of Labor is authorized to—

1. Formulate, promulgate, and enforce safety regulations applicable to employments under the act.
2. Make studies and investigations with respect to safety provisions and the causes and prevention of injuries and from time to time make the Congress such recommendations as he may deem proper as to the best means of preventing such injuries.
3. Provide for the establishment and supervision of programs for the education and training of employers and employees in the recognition, avoidance, and prevention of unsafe working conditions.
4. Consult with and advise employers as to the best means of preventing injuries.
5. Hold such hearings, issue such orders, and make such decisions, based upon findings of fact, as are deemed to be necessary to enforce the regulations.

We believe that the law and our safety promotion activities under it will encourage employers to reexamine their operations, to eliminate or avoid hazards to the life, health, and safety of the men attached to their industries. The Department has formulated and developed the appropriate safety codes. The tentative ship repair code has been circulated and the comments are being incorporated in a revised document. The stevedoring codes was distributed to management and labor is late March and is now being revised by these groups. We are providing a reasonable opportunity to interested parties to comment on the proposed safety regulations. Our objective in the code enforcement will be to allow a reasonable period for the correction of hazardous or unsafe conditions prior to punitive action. We also plan to make regular and special inspections of equipment, working conditions, and workplaces; to take enforcement actions as appear warranted on the basis of the facts developed in investigations made pursuant to the act.

The law places a strong responsibility upon the Department of Labor for the establishment and supervision of programs for the education and training of

employers and employees in the recognition, avoidance, and prevention of unsafe working conditions. Our experience supports the belief that with adequate resources and the active cooperation of management and labor this phase of our proposed program should have constructive and far-reaching results. Our safety training responsibilities will be stressed, as will those features of the law which authorize our safety engineers to consult with and advise employers as to the best means of preventing injuries through full-time safety programs.

As our budget estimate indicates, the Bureau is requesting \$417,000 to place the anticipated supplemental for 1959 on an annual basis in 1960. With these funds, the Bureau proposes to establish 14 maritime field offices, in addition to our present ones in New York, New Orleans, and San Francisco, concentrating our inspectional and training staff in those ports where high-risk exposures and the accident experience bear special attention. The 17 field offices, for example, include all ports which recorded 1 percent or more of the total number of disabling injuries in 1958 and in the aggregate accounted for almost 90 percent of all injuries in the industries.

REGISTRATION AND DISCLOSURE OF WELFARE AND PENSION PLAN DATA

The other new program is that required by Public Law 85-836, the Welfare and Pension Plans Disclosure Act, which became effective January 1, 1959. Under this law, all plan administrators must file with the Secretary of Labor two copies of the description of each welfare and pension benefit plan within 90 days of the effective date of the Act. Also, each administrator must file an annual report within 120 days after the close of the plan's fiscal, calendar, or policy year. Similarly changes or amendments in a plan must be filed with the Department so that an up-to-date description of a plan is always available to beneficiaries.

No accurate statistics are currently available either as to the numbers of welfare and pension plans in existence or the number of workers covered by such plans. Estimates of coverage have ranged from 80 to 90 million workers and their dependents. The number of plans subject to the act's reporting requirements has been estimated at a minimum of 250,000. In the absence of accurate statistics these initial budget estimates are based upon an anticipated minimum workload of 250,000 filings of the required plan descriptions. A similar number of annual financial reports will be filed, making a workload of at least 500,000 cases to be handled prior to July 1, 1960. These figures make no allowance for the situations in which the employer or administrator changes the provisions of his plan and is required by the law to file copies of these amendments with the Department. A study of at least the first year's experience in administering the law will be necessary before precise workload calculations can be made for the future.

In administering its responsibilities, as it sees them, the Bureau must receive, identify, and file submissions prior to making them available for inspection in a public documents room as required by the law. In the course of its review of the materials submitted certain significant characteristics of each plan will be noted so that, for the first time, accurate and comprehensive data can be compiled, for example, on the number of plans, workers, and participants covered by plans, the types of benefits provided, and the amounts of money contributed or accumulated in funds and investments said to exceed \$35 billion.

The Secretary is also charged with the responsibility of developing forms for use by plan administrators, form D-1 (plan description) was made available in December, and to date more than 800,000 pamphlets containing reporting forms and instructions have been distributed. Form D-2 (annual report) was made available in February and copies are being distributed upon request and to administrators who have filed D-1's. The amount requested for 1960 includes an increase of \$445,000 to place this activity on an annual basis.

REGISTRATION OF LABOR UNION DATA

The Bureau administers those sections of the Labor-Management Relations Act which require labor unions, as a condition precedent to the use of National Labor Relations Board services, to file certain organizational and financial data with the Secretary of Labor. More than 42,000 unions have registered since 1947. Annual registration are about 24,000 unions.

The reporting form, which formerly required a breakdown of transactions into 8 to 10 categories, was revised last year. The current form requires a

breakdown in more than 50 items, and an accompanying schedule requires detailed supporting itemization of (1) financial transactions relating to sale of assets; (2) repayments of loans; (3) nature of contributions or gifts; (4) value of real property; and (5) the obligation of assets pledged or used as collateral or security.

Another factor which has contributed to the time needed is the interest in such congressional committees as the Senate Select Committee on Improper Activities in the Labor or Management Field, other Federal agencies such as the Internal Revenue Service and the Federal Bureau of Investigation, and union members and officers.

The increased complexity of the work and the greater interest in the registration material requires additional funds to handle the work effectively. The positions requested are a GS-9 accountant to provide answers to technical questions, a GS-4 examiner, and a GS-3 typist. Also, \$6,450 is requested for temporary employment to handle the workload during the peak period January-April, when about 13,000 registration notices are issued. Total request for increased workload is \$26,000.

IMPROVING STATE LABOR LEGISLATION

In addition to the preceding activities, for which increased funds are requested, the Bureau's activities in three other fields will continue at the same level in 1960. The first of these is improving State labor legislation. This consists of assistance to the States in developing improved labor laws, more effective administration, and other measures to achieve this objective. This is carried out by serving as a national resource for technical information on all types of labor law and administrative techniques; reviewing changing developments; appraising State experience as a basis for development of new or improved standards and for giving technical advisory assistance to State labor departments and other State and national groups.

During 1958, the Bureau gave technical assistance on labor law and administration to 47 States, Alaska, the District of Columbia, and Hawaii, including personal consultation to 46 States on such subjects as workmen's compensation, child labor, minimum wage, wage payment, safety, etc. It also serviced State safety agreements, whereby State inspectors made 1,557 investigations required by the Public Contracts Act without charge to the Federal Government.

In addition, 1,300 State labor bills and acts were received, recorded, indexed, and their progress followed through legislatures. This information is available to all State labor commissioners, workmen's compensation boards, legislative committees, unions, and others concerned with legislative proposals in the various States.

During 1960 this activity will be geared to the economic and industrial developments in the intervening year. As planned now, it will center on improving certain aspects of workmen's compensation, including full protection for workers exposed to radiation hazards. The widely expanding use of atomic energy for peaceful purposes raises many problems with respect to workmen's compensation protection for workers injured as the result of radiation exposure. In its work on this problem the Bureau has had the advice and cooperation of the Atomic Energy Commission and the Council of State Governments. The Bureau prepared an analysis of workmen's compensation laws showing the status of workers with radiation injuries under existing laws which was included in the AEC report to the Joint Committee on Atomic Energy. At the request of the Council of State Governments, technical material on needed changes in State laws to provide full protection has been prepared. The council called in their Subcommittee on Workmen's Compensation Laws and the Committee on Atomic Energy Laws of the National Association of Attorneys General to consider these. It is hoped that they will go to the States through the regular channels of the council for consideration in the 1959 legislative sessions. In addition, statutory minimum wage and strengthening State labor departments as well as participation in planning and preparing materials for the 1960 White House Conference on Children and Youth will be given special emphasis.

In the field of workmen's compensation, the emphasis will be directed to improvement of administration. State administrators today are greatly concerned in improving claims procedures and in developing ways to speed up payment of benefits. The Bureau plans to develop and hold, in cooperation with State workmen's compensation administrators, the first two of a series of regional working conferences to discuss day-to-day administrative problems, to see how

other States handle them, to exchange information, know-how and techniques, and to devise better and more uniform administrative methods. Summaries of the discussions will be made available to other administrators.

REDUCING INDUSTRIAL ACCIDENTS

In addition to the services provided in the maritime safety field, the Bureau works with Federal and State agencies, industry, labor unions, and other organizations concerned with occupational safety. The national accident-frequency rate for manufacturing for 1957 was 11.4, as compared with 13.4, 11.9, 12.1, and 12, for 1953-56.

During 1958, the Bureau conducted 26 safety training courses for State employees, 25 training courses and talks for union members, 52 training courses for Federal employees, and 36 training courses and talks for maritime employees. In all, training was given to 3,688 individuals. This work is continuing in 1959 and 1960 at approximately the same rate.

The Bureau also provides services for the Federal Safety Council and the 92 field councils, which encourage safety activities in the various installations. The accident-frequency rate for Federal establishments for 1957 was 8.3, as compared with 7.8, 7.7, 7.8, and 8 for the period 1953-56. As a step toward stimulating greater safety efforts by the Federal Government, in 1954 the President established two annual safety awards; one for agencies of 50,000 and more employees and one for smaller agencies. The 1957 awards were presented to the Atomic Energy Commission and the Department of the Army.

The Bureau also maintains a staff of technically trained experts who perform research into hazardous occupations or processes, formulate safety codes and guides, and prepare technical bulletins and materials. About 600 technical problems and consultations are handled each year.

IMPROVING CONDITIONS OF MIGRATORY WORKERS

There has been encouraging and continuing progress in the improvement of conditions of domestic migratory farm workers.

During 1958 crew-leader regulations were developed and suggested standards were prepared for Federal legislation to provide for registration of crew leaders. The Bureau of Labor Standards gave technical assistance to several States in preparation of bills for legislation, including establishment of State migratory labor commissions (Rhode Island, Maryland); regulation of transportation (Colorado, Pennsylvania); regulation of labor camps and crew leaders (Connecticut, Pennsylvania, Minnesota, Michigan). In 1957, 47 bills affecting agricultural workers were introduced in 4 State legislatures. Legislation was enacted in three of these States (New York, Rhode Island, Maryland). During fiscal 1958, State migratory labor committees were formed in Rhode Island, Maryland, North Dakota, Oregon, and Colorado.

This brings the total of such committees at the close of fiscal year 1958 to 21. It is believed that at least 20 additional States have migratory labor problems of sufficient importance to make the establishment of State committees essential if coordinated program objectives are to be achieved on a nationwide basis.

During 1960, the program emphasis will continue to be on aid to the States in the establishment of State committees and in giving program assistance to established committees. An average of four new committees in both 1959 and 1960 is estimated. The Bureau will also continue and expand its technical assistance in legislation as more States move to include such legislation in their legislative programs.

PROTECTING YOUNG WORKERS

The Bureau's child-labor and youth-employment program is concerned with the elimination of harmful child labor and the development of suitable employment opportunities for youth.

To meet these objectives, the Bureau has developed and distributed material dealing with the problems and factors associated with the employment of youth, particularly those in the 16-18 age bracket. These included "Guidelines for Employment of Young Workers" and "Highlights on Young Workers Under 18." A third publication, "You Can Hire Teenagers—Here's How," was also widely distributed through the facilities of State agencies and the employment service.

To promote training of youth in safe work habits and practices, Bureau staff

developed, in cooperation with the National Safety Council and the U.S. Office of Education, the program on the school's contribution to safety at the 1958 President's Conference on Occupational Safety, participated in plans for following up on the Conference recommendations and discussed these recommendations at the annual convention of the American Industrial Arts Association.

The Bureau gave continuing support to the Department's stay-in-school campaign by distributing more than 100,000 posters for use in post offices, schools, and other places, and by supplying requested copies of the Stay-in-School Handbook, which the Bureau had prepared in 1957 in initiating this nationwide drive.

Services under the child-labor provision of the Fair Labor Standards Act included (1) the development of amendments to three hazardous occupations orders and (2) a study and analysis of the desirability and feasibility of amending the Federal child-labor regulation to allow some employment of 14- and 15-year-olds on school-supervised work programs during part of the school hours. In total, the Bureau gave about 1,600 services on child-labor and youth-employment problems to national organizations, Federal agencies, Members of Congress, and interested individuals.

The steady increase in the youth population will add to the need for the Bureau's services. By 1965, the age group 14-17 is expected to reach a total of 14.3 million, a 40-percent increase over 1957. However, the expected increase in school enrollment will not decrease the number of out-of-school youth in the labor market, or the number of students working or seeking work. To assist those planning vocational futures of youth, the Bureau published "Young Workers Under 18—Today and Tomorrow," illustrating in chart form present and projected statistics on young workers.

To aid you at work or seeking work, and to assist employers and others working with them, the Bureau will in 1959 issue a pamphlet addressed to young workers on what their responsibilities are and on labor laws affecting them.

In addition, the Bureau is preparing a handbook on youth employment which brings together basic facts on such subjects as changing occupational patterns, labor force participation of early school leavers, and employment of school-enrolled youth. Parts of this will be published, as completed, in 1960.

We plan also to initiate the preparation of a manual of suggestions on needed research on child labor and youth employment, emphasizing the areas in which information is lacking the practical application of information in planning action programs, and the study methods and approaches most feasible for different types of community groups to undertake, to meet a recurring demand for research advisory service from private organizations and groups dealing with youth-employment problems.

Promotional and educational activities to protect minors from injury will be continued with the Office of Education and others. This will include the development of safety materials to aid local vocational education coordinators in their safety programs as, for example, the preparation of a checklist for use in determining whether a place of employment is safe, and the preparation of a 1-day course in the fundamentals of safety.

MANDATORY INCREASES

In addition to the program increases previously covered, the 1960 estimate includes \$1,300 for increased postage costs under Public Law 85-426 and \$2,928 for the extra day of pay in 1960 (\$2,756 for salaries and \$172 for retirement fund contributions).

ACTIVITIES OF BUREAU

Mr. MOTLEY. I would like to make a few remarks on the changes in the 1960 request as compared to the 1959 request. The Bureau's activities include the promotion of occupational safety, technical advice to State labor departments on labor law and administration, improved conditions for migratory agriculture workers, protection of young workers, and the handling of union organization and financial reports.

In addition, as a result of the 1958 legislation, the Bureau's estimate for 1960 includes the additional amount of \$417,000 for the expanded safety activities under the 1958 amendments to section 41 of

the Longshoremen's and Harbor Workers' Compensation Act and an additional amount of \$445,000 for the new activities required by the Welfare and Pension Plans Disclosures Act.

These amounts will place these two activities on an annual basis, assuming that the supplemental funds requested for 1959 will be provided.

These laws, Senators, were passed in the closing days of the 85th Congress and it was not possible to obtain additional funds.

However, it was indicated by discussion in the Senate that we should finance necessary operations from available funds until the new Congress convened.

MARITIME SAFETY FIELD

In the maritime safety field the existing staff was diverted from regular activities to develop drafts of the proposed ship repair and stevedore codes. These two codes have been circulated to labor and management for comments.

No additional activities have been carried out under the legislation.

Necessary field and national office personnel will be recruited as soon as funds are appropriated.

In connection with the Welfare and Pension Disclosure Act, which went into effect January 1, it was necessary in this case to prepare forms for use by plan administrators, purchase equipment, and recruit initial staff.

The Bureau is operating under an accelerated apportionment, pending enactment of a 1959 supplemental appropriation.

The Secretary, in the Welfare and Pension Disclosure Act, was authorized to prepare forms for descriptions and annual reports. This has been done. Plan descriptions are now being received and annual reports will begin by May 1.

ADMINISTRATION OF LABOR-MANAGEMENT RELATIONS ACT

Additional funds in the amount of \$26,000 are also requested for administering those sections of the Labor-Management Relations Act which requires labor unions to file certain organization and financial data with the Secretary of Labor.

These additional funds are needed——

Senator CHAVEZ. That is a new item?

Mr. MOTLEY. No, sir; that is an increase over the present. The reason for these additional funds, Senator, is that the reporting forms have been revised to provide additional information and also we are providing a great deal of information to Senator McClellan and his congressional committee in connection with his hearings.

Senator CHAVEZ. At the time the labor bill was up for consideration?

Mr. MOTLEY. Yes, and previous hearings which he has had. A great deal of the information which was the initial information for his committee was secured from these records.

Senator CHAVEZ. As I understood, you are asking for that in 1960. Did you request that item in the supplemental?

Mr. MOTLEY. No, sir not in the supplemental; just in the regular budget.

All other activities in the requested budget do not reflect any changes from fiscal year 1959. It is just these two additional items as a result of legislation and a small increase for the Labor-Management Relations Act financial work.

Senator CHAVEZ. What is the House history on those items? Did you make a request there?

Mr. MOTLEY. We made the request for 1960.

Senator CHAVEZ. Did you make the request to the Budget Bureau?

Mr. MOTLEY. Yes.

Senator CHAVEZ. Did they approve?

Mr. MOTLEY. Yes.

Senator CHAVEZ. What did the House do?

Mr. MOTLEY. The House has not acted on it.

Senator HILL. They have not acted on it, Senator. I believe they are meeting tomorrow morning. The subcommittee has acted, but as you know over there, they did not reveal the actions of the subcommittee until the full committee has acted.

The full committee is acting tomorrow.

Senator CHAVEZ. We are just considering this request, brand new, offhand and before the House takes any action?

Senator HILL. That is correct.

ITEMS CONSIDERED BY HOUSE

Mr. MOTLEY. However, Senator, the 1959 supplemental budget for the welfare and pension legislation and the maritime safety program has been favorably considered by the House.

Senator HILL. Yes, and they allowed the budget estimates did they not?

Mr. MOTLEY. That is correct, and so did the Senate.

Senator HILL. In the supplemental bill, which bill passed the House and has been acted on by our committee and is before the Senate today for action.

Mr. MOTLEY. It was passed by the House. I don't believe the Senate has acted on it.

Senator HILL. It is scheduled for action today.

Mr. DODSON. There was a small reduction made in the estimate for the welfare and pension plan. I think it was \$45,000 out of \$450,000.

Mr. MOTLEY. It was approved in the amount of \$405,000.

Senator HILL. Do you think you can get along all right with that reduction?

Mr. MOTLEY. Yes; we feel we can operate with that amount.

Senator HILL. All right.

Have you finished your statement?

Mr. MOTLEY. Yes, sir.

Senator HILL. Senator Byrd, do you have any questions?

Senator BYRD. No, thank you, Mr. Chairman.

Senator HILL. Thank you very much. We appreciate your statement.

Mr. MOTLEY. Thank you, Mr. Chairman.

Senator HILL. Now, the Bureau of Veterans' Reemployment Rights; Mr. Bradley.

Mr. Bradley, we are glad to have you here, sir. We are glad to have you proceed in your own way.

BUREAU OF VETERANS' REEMPLOYMENT RIGHTS

STATEMENT OF HUGH W. BRADLEY, DIRECTOR, ACCOMPANIED BY
JOHN J. GILHOOLEY, ASSISTANT SECRETARY

APPROPRIATION ESTIMATE

"For expenses necessary to render assistance in connection with the exercise of reemployment rights under section 8 of the Selective Training and Service Act of 1940, as amended (50 U.S.C. App. 308), the Service Extension Act of 1941, as amended (50 U.S.C. App. 351), the Army Reserve and Retired Personnel Service Law of 1940, as amended (50 U.S.C. App. 401), and section 9 of the Universal Military Training and Service Act (50 U.S.C. App. 459), and the Reserve Forces Act of 1955 (69 Stat. 598), **[\$542,000]** \$592,000."

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$542,000	\$592,000
Proposed for later transmission: For pay act costs authorized by Public Law 85-462.....	46,000	-----
Total direct appropriation or estimate.....	588,000	592,000

Obligations by activity

Description	1959		1960		Change	
	Position	Amount	Position	Amount	Position	Amount
1. Promotion of compliance and assistance to veterans.....	50	\$459,400	50	\$462,656	-----	+\$3,256
2. Executive direction and management services.....	14	128,600	14	129,344	-----	+744
Total direct obligations.....	64	588,000	64	592,000	-----	+4,000

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	64	64	None
Average number of all employees.....	68	68	None
01 Personal services.....	\$458,030	\$459,750	+\$1,720
02 Travel.....	50,000	50,000	None
03 Transportation of things.....	2,000	2,000	None
04 Communication services.....	16,270	18,550	+2,280
06 Printing and reproduction.....	15,600	15,600	None
07 Other contractual services.....	5,670	5,670	None
08 Supplies and materials.....	10,300	10,300	None
09 Equipment.....	1,000	1,000	None
11 Grants, subsidies, and contributions.....	28,830	28,830	None
15 Taxes and assessments.....	300	300	None
Total direct obligations.....	588,000	592,000	+4,000

Summary of Changes

Enacted appropriation.....	\$542, 000
Proposed for later transmission—for increased pay costs under Public Law 85-462.....	46, 000
Total estimated funds available in 1959.....	588, 000
Estimate for 1960.....	592, 000
Total change.....	+4, 000
Mandatory items:	
Increase in postal rates (Public Law 85-426).....	+2, 280
Extra day of pay (261 days in 1959 and 262 days in 1960).....	+1, 720
Administrative adjustments:	
A total of 1.3 man-years of employment less than contemplated in the 1959 estimate to.....	-10, 330
(a) Adjustment of nonlabor items in line with 1958 actual experience.....	+3, 410
(b) To provide for change in average salary rates from the 1959 estimate due to within grade and grade to grade promotions not included in the 1959 estimate.....	+6, 920
Net change.....	+4, 000

PREPARED STATEMENT

Mr. BRADLEY. Thank you.

Senator HILL. Your budget estimate is just \$4,000, I believe, over this year; is that right?

Mr. BRADLEY. Yes, sir.

I have this prepared statement, Mr. Chairman, which I will ask to be placed in the record.

Senator HILL. That may go into the record at this point.

(The statement referred to follows:)

STATEMENT OF HUGH W. BRADLEY, DIRECTOR, BUREAU OF VETERANS' REEMPLOYMENT RIGHTS

The budget estimate before you for the fiscal year 1960 is \$4,000 greater than the amount allowed in 1959. The change is necessary to cover two mandatory items, an extra day of pay and an increase in the postage rate. The budget will provide a permanent paid staff of 64 positions, 14 in the national office and 50 in the field. No expansion in personnel or in program operations is anticipated in 1960.

Aside from unemployment compensation for ex-servicemen, the right to reemployment is the only readjustment benefit provided servicemen who entered the Armed Forces after January 31, 1955. The great majority of servicemen now being released entered on duty after the 1955 date. These two readjustment programs in the Department of Labor are closely related. Servicemen who return to their preservice employment will not need unemployment compensation upon release from military service, while those we find ineligible for reemployment may be referred to local employment offices for placement or unemployment compensation to tide them over until employment is found.

Reemployment rights assumed a greater importance in fiscal 1958 and during the first half of 1959 due in part to the economic situation but primarily to improvements in the Bureau's program of assistance to servicemen through the facilities of separation centers of the armed services. The workload in 1960 is expected to be at substantially the same level as that shown in the attached table for the first half of this fiscal year.

While the demand for reemployment information and assistance is greater now than it was before the Departments of Labor and Defense began a joint educational program at separation centers, the program has enabled us to speed up our service to ex-servicemen and their employers and to improve the quality of the assistance rendered. Most of the problems we now handle are received sufficiently early after the servicemen are released from

the Armed Forces to avoid many controversies that heretofore arose months after reemployment had been denied or improperly accorded. More than half of the cases disposed of during the first half of this fiscal year were settled on a promotion of compliance basis before a violation had occurred or sufficiently early after application for reemployment to avoid disputes and compensatory damage claims.

The attached table compares the monthly average workload received and handled to completion in fiscal years 1957, 1958, and 1959. The number of problems and cases received during the first half of fiscal 1959 was at a monthly rate of 9 percent greater than in 1958 and 29 percent greater than in 1957. The monthly rate of problems and cases closed increased substantially after all of the additional personnel allowed in 1958 had been selected and trained. The monthly rate of problems and cases closed during the 12-month period, January 1–December 31, 1958, was 32 percent greater than for the same period in 1957. During the first 6 months of this fiscal year a monthly average of 4,643 problems and cases were closed as compared to 3,856 for the same period last year, an increase of 20 percent.

The backlog of problems and cases as of January 1, 1958, was 10,700 compared to 7,813 on January 1, 1959, a reduction of 27 percent. The present backlog consists of 5,585 problems and 2,228 cases. The problem backlog has been reduced 26 percent and the case backlog 28 percent. This constitutes about a 2-month backlog in problems and a 3-month backlog in cases. Because of the normal lag in following these work items through from initiation to completion, we do not expect to be able to reduce these backlogs by more than 25 percent. However, we do expect to have no more than a 1-month backlog in problems and a 2-month backlog in cases by the end of fiscal 1960.

It should also be pointed out that a number of the cases closed in the first 6 months of this fiscal year had been in the Bureau's pending load for a year or more awaiting clarification of several complex issues by the courts. All of the work required in developing the facts in these cases had been performed in previous fiscal years and very little time was required this year in the preparation of closing notices to interested parties.

Two important actions by the United States Supreme Court, *McKinney v. M&T Railroad*, June 23, 1958, and *Moe v. Eastern Airlines*, June 30, 1958, together with subsequent actions by circuit courts of appeal, such as *Bassett v. T&P Railroad*, August 8, 1958, contributed directly or indirectly to the closing of many old cases this year. The number closed during the first half of this year was about 55 percent greater than in the same period last year and should continue at a higher rate during the remainder of this fiscal year. Because of this acceleration, we do not expect to maintain as high a closing rate in 1960 as that reflected for 1959. However, we do expect to maintain a rate higher than in fiscal 1958, which was 757 a month. This should enable us to keep abreast of the number of cases we expect to receive in 1960, estimated to be in excess of 760 a month. The problem load is expected to remain at about the present level and little if any change in personnel requirements is foreseen in the next year or two.

Workload statistics and comparison, fiscal 1957, 1958, and 1st 6 months of fiscal 1959

	Fiscal 1957		Fiscal 1958		Fiscal 1958. 1st 6 months 1958, July 1- Dec. 31, 1957		Fiscal 1959, 1st 6 months 1959, July 1-Dec. 31, 1958	
	Total	Monthly average	Total	Monthly average	Total	Monthly average	Total	Monthly average
1. Problems and cases received.....	44,957	3,746	53,603	4,467	28,097	4,683	29,192	4,865
Problems received.....	38,137	3,178	44,459	3,705	24,065	4,011	24,462	4,077
Cases received.....	6,820	568	9,144	762	4,032	672	4,730	788
2. Problems and cases closed.....	45,754	3,813	52,860	4,405	23,136	3,856	27,860	4,643
Problems closed.....	39,072	3,256	43,767	3,647	19,461	3,244	22,562	3,760
Cases closed.....	6,682	557	9,093	758	3,675	612	5,298	883
3. Problems and cases pending at end of period.....	5,739	-----	6,482	-----	10,700	-----	7,813	-----
Problems.....	2,994	-----	3,686	-----	7,598	-----	5,585	-----
Cases.....	2,745	-----	2,796	-----	3,102	-----	2,228	-----

REASON FOR REQUEST

Senator HILL. Tell us just why you need this additional \$4,000.

Mr. BRADLEY. \$4,000, Mr. Chairman, is actually the mandatory funds that arise out of the extra day of pay which is around \$1,720 and the increase in the cost of postage which is \$2,280, which comes to a total of \$4,000, a more or less mandatory figure.

Senator HILL. In other words, the increased cost in postage due to the fact that we raised the postal rates in the last session of Congress and this extra day?

Mr. BRADLEY. That is right.

Senator HILL. When you speak of this extra day what do you refer to?

Mr. BRADLEY. The extra day is 1 day more than the normal number of working days in the year. That is in 1960 above 1959.

Senator HILL. We do not have a leap year this year? How do you figure that?

Mr. BRADLEY. It depends on the pay periods and where the work-days fall in the year as against Saturdays and Sundays. It varies slightly up and down.

Of course, an item of \$1,720 in our small budget is pretty sizable.

Senator HILL. The clerk has just handed me a table showing the number of days of pay for fiscal years 1959-70, by quarters. We will place this table in the record at this point.

(The table referred to follows:)

Days of pay, fiscal years 1959-70

Fiscal year	1st quarter	2d quarter	3d quarter	4th quarter	Total	Extra days
1959.....	66	66	64	65	261	1
1960.....	66	66	65	65	262	2
1961.....	66	65	65	65	261	1
1962.....	65	65	65	65	260	-----
1963.....	65	66	64	65	260	-----
1964.....	66	66	65	65	262	2
1965.....	66	66	64	64	261	1
1966.....	66	66	64	65	261	1
1967.....	66	65	65	65	261	1
1968.....	65	65	65	65	260	-----
1969.....	66	66	64	65	261	1
1970.....	66	66	64	65	261	1

ADDITIONAL EMPLOYEES REQUESTED

Mr. BRADLEY. There are one or two items in my prepared statement, Mr. Chairman, that I would like to bring to the attention of the committee.

Senator HILL. All right, sir.

Mr. BRADLEY. First, I would like to point out that we are requesting no additional personnel for fiscal 1960, above the staff employed this year, and in 1958. It is my opinion the present staff is adequate to handle the workload expected in 1960 effectively and with reasonable expedition.

You will recall allowing us an increase of 15 employees in 1958. I am pleased to report that we are now providing more effective and faster service to ex-servicemen and their employers than at any time in the past. At the time I appeared before the committee last year we had a pending backlog on March 31 of 2,926 reemployment rights cases.

I am pleased to report that our case backlog on March 31 this year was 1,971, a reduction of 43 percent.

There has also been a small reduction in the problem backlog of about 3 percent.

I believe we will be able to further reduce the case and problem backlog in 1960 by about 25 percent which is as low a figure as we can expect to reach, due to inadvertent delays between date of initiation and date of final action.

I want to thank you for the opportunity to discuss our program with the committee and for the interest you have always shown in this activity.

I think that covers about all I have to say, Mr. Chairman. I shall be glad to answer any questions.

Senator HILL. Senator Byrd, do you have any questions?

Senator BYRD. I have no questions, thank you.

Senator HILL. Thank you very much, Mr. Bradley. We appreciate your statement and your presence.

Mr. BRADLEY. Thank you.

BUREAU OF APPRENTICESHIP AND TRAINING

STATEMENT OF W. C. CHRISTENSEN, DIRECTOR ACCOMPANIED BY
EDWARD E. GOSHEN, EXECUTIVE DIRECTOR FOR APPRENTICE-
SHIP SERVICE; AND EDWARD F. GALLAGHER, CHIEF, DIVISION
OF MANAGEMENT SERVICES

APPROPRIATION ESTIMATE

"For expenses necessary to enable the Secretary to conduct a program of encouraging apprentice training, as authorized by the Acts of March 4, 1913 (5 U.S.C. 611), and August 16, 1937 (29 U.S.C. 50), **[\$3,700,000]** \$4,047,000."

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$3, 700, 000	\$4, 047, 000
Proposed for later transmission: For pay act costs authorized by Public Law 85-432.....	325, 000	
Total direct appropriation or estimate.....	4, 025, 000	4, 047, 000

Obligations by activity

Description	1959		1960		Change	
	Posi- tion	Amount	Posi- tion	Amount	Posi- tion	Amount
1. Training promotion and service to industry..	432	\$3, 465, 850	432	\$3, 484, 900	None	+\$19, 050
2. Training research and technical services.....	38	301, 100	38	302, 740	None	+1, 640
3. Executive direction and management.....	28	258, 050	28	259, 260	None	+1, 310
Total direct obligations.....	498	4, 025, 000	498	4, 047, 000	None	+22, 000

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	498	498	None
Average number of all employees.....	486	486	None
01 Personal services.....	\$3, 283, 000	\$3, 296, 450	+\$13, 450
02 Travel.....	317, 300	317, 300	None
03 Transportation of things.....	10, 000	10, 000	None
04 Communication services.....	82, 475	90, 175	+7, 700
05 Rents and utilities.....	2, 000	2, 000	None
06 Printing and reproduction.....	36, 750	36, 750	None
07 Other contractual services.....	50, 925	50, 925	None
08 Supplies and materials.....	32, 500	32, 500	None
09 Equipment.....	10, 000	10, 000	None
11 Grants, subsidies, and contributions.....	196, 500	197, 350	+850
15 Taxes and assessments.....	3, 550	3, 550	None
Total direct obligations.....	4, 025, 000	4, 047, 000	+22, 000

Summary of changes

Enacted appropriation-----	\$3, 700, 000
Proposed for later transmission, for increased pay costs under Public Law 85-462-----	325, 000
Total estimated funds available in 1959-----	4, 025, 000
Estimate for 1960-----	4, 047, 000
Total change-----	+22, 000
Mandatory items:	
Increase in postal rates 1960 (Public Law 85-426)-----	+7, 700
Extra day of pay (261 days in 1959 and 262 days in 1960) :	
Personal services-----	+13, 450
Contribution to retirement fund-----	+850
Administrative adjustments:	
Additional cost in 1959 due to within-grade salary increases and reallocations not included in 1959 estimates-----	+55, 150
Difference in personal services cost made up from :	
(a) Reduction of 7.2 man-years of employment-----	-48, 360
(b) Reduction in other objects (principally travel and contractual services)-----	-6, 790
Net change-----	+22, 000

Senator HILL. Now the Bureau of Apprenticeship. Sir, we are glad to have you, Mr. Christensen and your associates, this morning. Do you have a prepared statement?

PREPARED STATEMENT

Mr. CHRISTENSEN. Yes, sir.

Senator HILL. Do you want to file your statement in full in the record, and then you may proceed in your own way to make your oral statement?

Mr. CHRISTENSEN. Yes, sir.

(The statement referred to follows:)

DIRECTOR'S STATEMENT FOR THE BUREAU OF APPRENTICESHIP AND TRAINING

Mr. Chairman and members of the committee, the estimate for the Bureau of Apprenticeship and Training for fiscal year 1960 is \$4,047,000. This represents an increase to provide for mandatory items of \$22,000 over the \$4,025,000 estimated to be available for obligation in the current year. The increase will provide for personnel costs involved in the extra day occurring in 1960 and for increase in postal rates. No program increase is requested.

The funds estimated will provide for the continuation of the program of stimulation of apprenticeship and training with which most members of this committee are familiar and for which they have evidenced a continuing interest and support. We feel that we have done much to deal with the problems which this committee has pointed out in the last 2 years, particularly with respect to reaching understandings with the vocational education system. We believe that our program proposals this year, as in the past, are in line with the objectives in which this Congress has expressed interest. In recent years our discussions with you have stressed our plans and proposals to extend our efforts and impact to areas of current need within the resources available to us. This emphasis could lead to an impression that we propose to project our activities beyond our responsibility at a sacrifice to the basic program. In an effort to dispel any such impression, I think it will be worth while to take a few moments to discuss the total program, the five major program areas, and indicate the different approaches we are taking with the States within those areas.

The five program areas our total current effort is being directed into are:

1. *National industry promotion*.—Bringing together National, State, and local units of industry for the development of unified on-the-job training efforts. This area will receive roughly 17 percent of Bureau effort in 1960.

2. *Strengthening construction industry joint apprenticeship committees*.—Our continuing activity with 3,800 joint committees in this program area is maintained at a constant level which in 1960 will represent about 33 percent of our total activity.

3. *Community level promotion*.—Encouraging community interest and action in manpower development among employers, local unions, schools, and civic organizations. This program area will become increasingly important as programs for area redevelopment are advanced. At present about 20 percent of Bureau effort is devoted to this approach.

4. *Local industry promotion*.—Providing assistance to local business and industry in apprenticeship and skill development. Its volume varies in relation to the various areas of emphasis in the Bureau's total program, but there is always a portion of industry which can only be reached as individual units at the local level. In 1960 this area will receive about 26 percent of Bureau effort.

5. *Strengthening workers technical knowledge*.—Encouraging workers to take advantage of educational and training opportunities to develop their potential more fully. We know that there must be a general upgrading of the labor force to prepare for new technology. In its work with labor and management, and in cooperation with other agencies, the schools, and labor and management, the Bureau can do much to assure that currently employed workers share in the Nation's current emphasis on increasing basic technical knowledge. To this end the Bureau proposes to devote about 4 percent of 1960 activities in this program area.

We believe that this distribution of effort will provide an effective program for 1960 completely within the Bureau's responsibility and which will contribute to the advancement of apprenticeship and training in the areas of need which your committee has repeatedly recognized.

I will be happy to attempt to answer any questions you have in respect to the Bureau's program proposals.

AMOUNT REQUESTED

Mr. CHRISTENSEN. Our statement and table pretty much indicate the request that we are asking the committee to consider this year, which is in effect the same appropriation as in 1959.

Senator HILL. Now, the figure I have shows an increase of \$22,000.

Mr. CHRISTENSEN. Yes, sir.

Senator HILL. What is that for?

Mr. CHRISTENSEN. That is for the so-called mandatory items as have just been discussed, postal rates, the extra day of pay, and the Bureau's contribution to the retirement fund.

Senator HILL. Why would that be an increase in that retirement fund?

Mr. GALLAGHER. Mr. Chairman, that \$850 is part of the cost of the extra day's pay—there is \$13,450 for the actual pay and \$850 for the retirement fund for that extra day.

Senator HILL. For that extra day?

Mr. GALLAGHER. Yes, sir.

Senator HILL. That is what I thought.

In other words, the extra day not only means the extra amount of pay, but also the extra amount of the retirement fund.

Mr. GALLAGHER. That is right.

Senator HILL. I wanted to make that clear for the record, sir.

This extra day has gotten awfully big in here. Will you make a statement as to how this extra day comes in?

Mr. DODSON. We very frequently refer to the salaries of the Government employees on an annual basis, or annual rate. Our pay period is comprised of 2 calendar weeks. The way the calendar falls there can be more days of pay within a given fiscal year than in another fiscal year.

It so happens in fiscal year 1960 there is 1 more day of pay than there is in fiscal year 1959.

Senator HILL. I think that makes the picture clear. Is there anything else you would like to add, sir?

Mr. CHRISTENSEN. I think not.

POSTAL RATES

Senator HILL. Talking about your postal rates, how do these postal rates affect you so much?

Mr. DODSON. We are required to reimburse the Post Office Department for their handling of our official mail. When the postal rates went up likewise our bill went up from the Post Office Department.

Senator HILL. All you send out through the U.S. mail, for the record, you have to reimburse out of your funds to the Post Office Department for this increased cost under these increased postal rates: is that right?

Mr. CHRISTENSEN. That is correct.

Senator HILL. In sum and substance, what you are practically saying is that your request is for just what you have for this fiscal year?

Mr. CHRISTENSEN. That is correct.

Senator HILL. Really there is no increase in additional personnel?

Mr. CHRISTENSEN. That is right.

Senator BYRD. Mr. Chairman, any reduction in the deficit so far as the Post Office Department is concerned resulting from increased postage is just a part of the picture, because although that deficit might be decreased it means an increase in the appropriation that will have to be made to these other departments for their reimbursement.

Senator HILL. I would say this: You see, after all, that part of the mails that are handled for our Government departments would be only a part, perhaps relatively not too large a part, of the overall mails handled for the whole United States.

So that deficit that the Post Office Department runs might come about much more from handling nongovernmental mail than from Government mail.

To say the least, the departments of Government pay the same rates for handling their mails that nongovernmental organizations operations and individuals pay.

Is that the story, Mr. Dodson?

Mr. DODSON. Yes.

I think when Congress passed that bill they had in mind that if the agencies had to pay for the postal cost it would have an effect of causing them to be economical in the distribution of a lot of material.

Senator BYRD. Is it not true that the reduction of the deficit in the operation of the Post Office Department which may have resulted from an increase in postal rates is somewhat offset by the increased cost to your Department and other agencies of the Government?

Mr. DODSON. I think it would have that effect.

AMOUNT INVOLVED IN POSTAL RATE INCREASE

Senator BYRD. Mr. Chairman, I would like to ask what in terms of dollars this increased postal rate has meant to this agency.

Mr. CHRISTENSEN. To our particular bureau this represents \$7,700.

Senator BYRD. That is not in the statement, is it?

Mr. CHRISTENSEN. Yes, it is.

Senator HILL. On what page is that?

Mr. GALLAGHER. Page 76 of the material submitted.

Senator HILL. In other words, the increased cost to the whole department is \$91,800; is that right?

Mr. DODSON. Yes, sir.

Senator HILL. Would you like to have this table in the record, Senator Byrd?

Senator BYRD. I would like to ask that it be placed in the record.

Senator HILL. Then we will put this table in the record at this point.

That will give us the picture not only as to your bureau, but as to all the bureaus in the whole Department.

(The table referred to follows:)

Revised 1959 base and analysis of the 1960 estimates as submitted to 86th Congress

Bureau	1959 appropriation		1959 proposed supplemental		Revised 1959 base		1960 estimate		Change from 1959 revised base	
	Position	Amount	Position	Amount	Position	Amount	Position	Amount	Position	Amount
Salaries and expenses:										
Office of the Secretary	187	\$1, 478, 000		\$124, 000	187	\$1, 602, 000	187	\$1, 621, 000		+\$19, 000
Working capital fund	124				124		124			
Office of the Solicitor	329	2, 431, 000		212, 000	329	2, 643, 000	334	2, 695, 000	+5	+52, 000
Bureau of Labor Standards	110	1, 004, 000	161	774, 000	271	1, 778, 000	275	2, 680, 000	+4	+902, 000
Bureau of Veterans' Readjustment Rights	64	542, 000		46, 000	64	588, 000	64	592, 000		+4, 000
Bureau of Apprenticeship and Training	498	3, 700, 000		325, 000	498	4, 025, 000	498	4, 047, 000		+22, 000
Bureau of Employment Security	831	6, 519, 000	10	630, 500	841	7, 149, 500	841	7, 262, 000		+112, 500
Mexican farm labor program (compliance)	58	480, 600		39, 000	58	519, 600	101	873, 000	+43	+353, 400
Bureau of Employees' Compensation	459	2, 810, 600		257, 000	459	3, 067, 600	458	3, 080, 000	-1	+12, 400
Bureau of Labor Statistics	958	7, 424, 500		595, 000	958	8, 019, 500	1, 024	9, 465, 000	+66	+1, 445, 500
Women's Bureau	61	462, 000		44, 000	61	506, 000	61	509, 000		+3, 000
Wage and Hour Division	1, 358	10, 500, 000		917, 000	1, 358	11, 417, 000	1, 344	11, 489, 000	-14	+72, 000
Total, salaries and expenses	5, 037	37, 351, 700	171	3, 963, 500	5, 208	41, 315, 200	5, 311	44, 313, 000	+103	2, 997, 800
Grants to States										
Unemployment Compensation for Veterans and Federal employees		325, 600, 000				325, 600, 000		328, 684, 000		+3, 084, 000
Revision of the Consumer Price Index		120, 800, 000		41, 200, 000		162, 000, 000	35	135, 000, 000		-27, 000, 000
Total direct annual appropriation	5, 037	483, 751, 700	171	45, 163, 500	5, 208	528, 915, 200	5, 346	508, 227, 000	+138	-20, 688, 200
Employees' Compensation Fund		71, 900, 000				71, 900, 000		62, 000, 000		-9, 900, 000
Total direct and indefinite appropriation	5, 037	555, 651, 700	171	45, 163, 500	5, 208	600, 815, 200	5, 346	570, 227, 000	+138	-30, 588, 200
Trust fund authorizations:										
Administration of longshore rehabilitation program	7	47, 400		4, 100	7	51, 500	7	51, 700		+200
Reimbursement from Mexican farm labor supply fund (S. & E.)	261	1, 550, 000		130, 000	261	1, 680, 000	218	1, 336, 700	-43	-343, 300
Total authorizations	268	1, 597, 400		134, 100	268	1, 731, 500	225	1, 388, 400	-43	-343, 100
Temporary unemployment compensation ¹	60	2 617, 928, 315			60	617, 928, 315			-60	-617, 928, 315
Total funds available	5, 365	1, 175, 177, 415	171	45, 297, 600	5, 536	1, 220, 475, 015	5, 571	571, 615, 400	+35	-648, 859, 615

Bureau	Mandatory items						Program items	
	Annualiza- tion of salary and new legislation	Extra day of pay	Postal rate change	Grants to States	Benefit payments	Statistical conversions	Position	Amount
Salaries and expenses:								
Office of the Secretary		\$5,475	\$1,525					+\$12,000
Working capital fund								
Office of the Solicitor	³ \$43,000	9,000						
Bureau of Labor Standards	862,000	3,400	1,600				+4	+35,000
Bureau of Veterans' Reemployment Rights		1,720	2,280					
Bureau of Apprenticeship and Training		14,300	7,700					
Bureau of Employment Security	82,500	21,000	9,000					
Mexican farm labor program (compliance)		2,200	1,200				+43	+350,000
Bureau of Employees' Compensation		10,045	7,355				-1	-5,000
Bureau of Labor Statistics		22,000	45,000	\$24,000		\$252,500	+25	+1,102,000
Women's Bureau		1,600	1,400					
Wage and Hour Division	151,400	37,900	12,000				-14	-129,300
Total, salaries and expenses	1,138,900	128,640	89,060	24,000		4 252,500	+57	+1,364,700
Grants to States								
Unemployment Compensation for Veterans and Federal Employees				13,126,000	-\$27,000,000			-10,042,000
Revision of the Consumer Price Index							+35	-230,000
Total direct annual appropriation	1,138,900	128,640	89,060	13,150,000	-27,000,000	4 252,500	+92	-8,447,300
Employees' Compensation Fund					-9,900,000			
Total direct and indefinite appropriation	1,138,900	128,640	89,060	13,150,000	-36,900,000	4 252,500	+92	+8,447,300
Trust fund authorizations:		155	45					
Administration of longshore rehabilitation program		4,000	2,700				-43	-350,000
Reimbursement from Mexican farm labor supply fund (S. & E.)								
Total authorizations		4,155	2,745				-43	-350,000
Temporary unemployment compensation ¹					5 -617,928,315			
Total funds available	1,138,900	132,795	91,805	13,150,000	-654,828,315	4 252,500	6 35	-8,797,300

¹ Available in fiscal year 1959 to Apr. 30, 1959.² Unobligated balance July 1, 1958.³ Includes additional 5 positions.⁴ Includes 41 positions.⁵ Excludes 60 positions.⁶ See footnotes 3, 4, and 5.

QUESTION OF CONFLICT

Senator HILL. Are there any other questions?

Off the record.

(Discussion off the record.)

Senator HILL. Thank you very much, Mr. Christensen.

Let me ask you one other question:

As you know, there have been some differences between your bureau and the vocational education people. Have you pretty well resolved those differences?

Mr. CHRISTENSEN. I think it is proper to say that everyone concerned is satisfied that there is no question of conflict any more.

Senator HILL. In other words, you think any conflict that has existed there has been now pretty well resolved?

Mr. CHRISTENSEN. I do.

Senator HILL. You must have had a Benjamin Franklin such as we had in the Constitutional Convention to help you out.

Mr. CHRISTENSEN. We had a lot of workers who worked at it and they have cleared up any misunderstanding.

Senator HILL. At one time there was quite some conflict there, I know, but you think all conflicts have been resolved?

Mr. CHRISTENSEN. I feel confident, Mr. Chairman, that they have been.

Senator HILL. That is very gratifying.

Thank you very much, sir.

Mr. CHRISTENSEN. Thank you.

BUREAU OF EMPLOYMENT SECURITY

STATEMENT OF ROBERT C. GOODWIN, DIRECTOR, BUREAU OF EMPLOYMENT SECURITY; ACCOMPANIED BY W. R. CURTIS, DEPUTY DIRECTOR; R. G. WAGENET, ASSISTANT DIRECTOR FOR UNEMPLOYMENT INSURANCE; WILLIAM U. NORWOOD, JR., ASSISTANT DIRECTOR FOR EMPLOYMENT SERVICE; FRANK JOHNSON, ASSISTANT DIRECTOR FOR FARM LABOR; H. DANIEL DARLING, DEPUTY ASSISTANT DIRECTOR, PROGRAM REPORTS AND ACTIVITY ANALYSIS; EDWARD L. OMOHUNDRO, CHIEF, VETERANS' EMPLOYMENT SERVICE; EUGENE LOVE, CHIEF, DIVISION OF BUDGETS AND FISCAL OPERATIONS; HERBERT A. MEYER, CHIEF, ESTIMATES AND EXPENDITURES BRANCH; JAMES E. DODSON, ADMINISTRATIVE ASSISTANT SECRETARY; AND U. S. HUDSON, DEPUTY ADMINISTRATIVE ASSISTANT SECRETARY

PREPARED STATEMENT

Senator HILL. All right, Mr. Goodwin, Bureau of Employment Security.

We are glad to have you here, sir, and your associates.

You have a prepared statement, do you not?

Mr. GOODWIN. What we would propose to do, Mr. Chairman, is submit for the record my statements and then I would like to make a few comments on each one of the appropriations that we have submitted, if that is satisfactory to the members of the committee.

Senator HILL. That may be done.

(The statement referred to follows:)

STATEMENT OF ROBERT C. GOODWIN, DIRECTOR, BUREAU OF EMPLOYMENT SECURITY

Mr. Chairman, with the committee's permission, I would like to make some general observations about the employment security program before discussing specifically each of our 1960 appropriation requests. I want to review briefly developments in the program during the recent period of high unemployment and what we expect for 1960.

ADMINISTRATIVE IMPACT OF UNEMPLOYMENT

The rise in unemployment during the recession was accompanied by very sharp increases in the number of claims for unemployment insurance between the early fall of 1957, and the spring of 1958.

Initial claims in August 1957—at the beginning of the recession—totaled less than 850,000. In January 1958, initial claims reached their peak at 2.3 million—which is the highest volume in the history of the program. Insured unemployment rose from slightly more than a million per week in August 1957, to a peak of 3.3 million in mid-April of 1958.

The number of different individuals dealt with in the program, when turnover among claimants is taken into account, reached a high of well over 5 million in April 1958. Before the recession—during fiscal year 1957—the highest number in any 1 month was a little over 3 million individuals.

In total the volume of unemployment insurance work in the first months of calendar year 1958 had risen to nearly three times the volume of work in the late summer of 1957. It is difficult to maintain peak operating effectiveness when workloads rise so sharply. The State employment security agencies were confronted with serious operating problems when the claims workloads almost tripled in an 8-month period. It was not possible to recruit, train, and house enough new employees to carry on all phases of their work. Therefore, some functions were not performed as frequently as necessary and others were not done as well as we would have liked. Some of the local office functions which were curtailed involved a sacrifice of adequate protection against improper payments. Such functions as the testing of the eligibility of claimants, informing claimants of their rights and responsibilities under the State laws, and other functions required to protect Federal and State benefit funds must be brought to maximum operating effectiveness as rapidly as possible.

I would not want this to be construed as criticism of the way in which the State agencies performed their jobs during the recession. The State agencies paid claimant's benefits more promptly than in any previous economic downturn and considering all circumstances did their job very well. However, we and the States believe that from this experience we can find out how to operate even better during such periods, and we are studying the problem for future applications.

I would be remiss if I did not acknowledge the aid which we received from the Appropriations Committees and the Congress as a whole in meeting the problems of the past year. The speed with which the Congress made funds available to pay for increased administrative costs was invaluable in getting benefits paid promptly.

EMPLOYMENT SECURITY AIDED RECOVERY

The contribution of the Federal-State employment security program toward easing the burden of the recession has received widespread public recognition. No other program contributed as greatly in offsetting wage losses. Between August 1957 and May 1958, unemployment benefit payments offset about 30 percent of the net drop in wage income. During calendar year 1958 as a whole about \$3.9 billion in Federal and State unemployment benefit payments were paid out through the employment security system. These payments were an important factor in maintaining consumer expenditures.

TEMPORARY UNEMPLOYMENT COMPENSATION

Early in the recession there was mounting public concern about the large number of workers who were exhausting their regular unemployment insurance benefits and were still unable to find a job. As the committee knows, the Con-

gress passed the Temporary Unemployment Compensation Act of 1958 to alleviate the problems of these workers.

I would like at this point, Mr. Chairman, to give you a brief report of the accomplishments under this law. The original Federal plan enacted on June 4, 1958 (Public Law 85-441) for extending benefits was adopted by 17 States. In these States, all unemployed workers who exhaust their regular State or Federal unemployment benefits are covered. Eleven such States signed agreements to extend payments of TUC until June 30, 1959, under Public Law 86-7 enacted March 31, 1959.

In addition, last year five States (Colorado, Connecticut, Illinois, Ohio, and Wisconsin) revised their own unemployment insurance laws to extend benefits temporarily. Since March 31, 1959, New York revised its own unemployment insurance law to extend benefits temporarily, thus withdrawing from the TUC program except for veterans, while Wisconsin discontinued payment of extended benefits under its law on March 31, 1959. Therefore under the original legislation 22 States paid TUC to all the workers covered by the State and Federal unemployment insurance programs of the employment security system for the extended period through March 31, 1959. Sixteen States agreed to extend these payments until June 30, 1959, under the extended program. In another 14 States the original Federal plan was adopted only for Korean veterans and Federal employees, but workers who exhaust their benefits under the State unemployment insurance laws receive no further benefits. Fifteen States agreed to pay extended temporary unemployment compensation benefits to Federal employees and veterans until June 30, 1959. Altogether, 36 States originally had programs for temporarily extending benefits to some or all covered workers who exhaust their regular benefits. Whereas 31 States now have programs to pay benefits through June 30, 1959, these programs apply to approximately 70 percent of all covered workers. For many eligible unemployed workers the potential maximum duration of benefits including temporary benefits is now 39 weeks—in Pennsylvania it is 45 weeks.

From late June 1958, when the program started, through March 1959 an estimated 1,512,000 workers have received approximately \$426 million in unemployment compensation payments under the Federal temporary unemployment compensation program. In addition, approximately 382,000 workers received \$110 million in unemployment compensation payments in the five States which adopted their own program. Thus, a total of \$536 million has been paid in temporary benefits to 1,894,000 workers. The average duration of temporary benefits has been 9 weeks, and the average weekly benefit amount \$31.

By June 30, 1959, it is estimated that about 1,900,000 workers will have received \$630 million in temporary unemployment compensation payments. Of this amount, approximately \$500 million will be under the Federal program.

I would like now to discuss some of the problems we face in the aftermath of the recession, and what lies ahead as we see it.

ECONOMY GAINS

As you know, many sectors of the economy have already recovered from the 1957-58 recession and begun to establish new highs. Gross national product, for example, which measures the value of goods and services produced in the country, show that as far as overall production is concerned the economy in the fourth quarter last year was about where it had been before the recession began. In the first quarter of this year, gross national product was at an all-time high, at a seasonally adjusted rate of \$465 billion. The rate for the present quarter will probably be even higher. A number of other important indicators of economic conditions have recovered from the recession and are establishing new records. Among these are industrial production, personal income, construction, retail sales, average weekly earnings of factory workers, and average factory hourly wage rates.

IMPROVEMENT IN UNEMPLOYMENT LAGS

However, unemployment still lags behind other indicators of well-being, despite a better than seasonal improvement between March and April. In April, total unemployment was estimated at 4.4 million on a seasonally adjusted annual rate of 5.8 percent of the work force. This is considerably above the prerecession level of 2.5 million unemployed and 3.7 percent, which was experienced in fiscal year 1957.

Unemployment usually lags when the economy is recovering from a downturn, partly because employers first increase production by lengthening the hours worked by the employees still on their payroll, and partly because output per worker usually rises in this stage of the business cycle. Another important factor tending to keep unemployment relatively high is that the labor force continues to expand, even during a recession. As a result we need some 600,000 to 700,000 additional job opportunities every year to keep unemployment from increasing.

EMPLOYMENT SERVICE EVALUATION AND IMPROVEMENT

During the past few months, we and the State agencies have undertaken an analysis of employment service programs and operations as related to recent economic fluctuations and current labor market conditions. We recognize that the first responsibility of the employment security program is to bring together the employer who needs a worker, and the worker who wants a job. In order to analyze the placement activity and focus attention on improving the employment service we held a national meeting of State administrators and employment service directors in Kansas City, Mo., in December. Through this meeting we attempted to draw out the best thinking of these people who operate the employment service across the country as to how services to workers and employers can be improved.

At this point we have really just set our sights on employment service improvement and agreed upon a few of the avenues toward this end. I hope to have a report of some definite progress for you at this time next year.

BUDGET ASSUMPTIONS FOR 1960

In preparing the budget requests which we are discussing today we have estimated that the uptrend in economic activity will continue at a steady but moderate rate in 1960. We have also estimated that this expansion will gradually reduce the volume of insured unemployment. Specifically, we have estimated that insured unemployment will average 2.1 million per week in 1960.

It is always difficult to predict precisely what the future economic developments will be. It is particularly difficult when the economy is beginning a new period of expansion, because the future speed of the recovery now underway cannot be determined. Our appropriation requests for 1960 are those which will be required in a moderately expanding economy with developing job opportunities, and gradually declining unemployment. In the event that insured unemployment declines and claims workloads are somewhat lower than have been estimated, job opportunities should be more plentiful. In such a situation, the employment service workloads in the budget would be too low. As a matter of fact, our actual experience in the last 2 or 3 months indicates that insured unemployment is already below the level we had estimated for fiscal year 1960. (February seasonally adjusted was at an annual rate of about 1.9 million insured unemployment and March at approximately 1.8 million, while placements are running well in excess of our fiscal year 1960 estimate. Seasonally adjusted the annual rate of placements in February was 6,150,000 and in March 6,650,000.

SALARIES AND EXPENSES

APPROPRIATION ESTIMATE

"For **[expense]** *expenses* necessary for the general administration of the employment service and unemployment compensation programs, including temporary employment of persons, without regard to the civil-service laws, for the farm placement migratory labor program; **[\$6,219,000]** \$7,262,000, of which **[\$1,145,800]** \$1,252,000 shall be for carrying into effect the provisions of title IV (except section 602) of the Servicemen's Readjustment Act of 1944."

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$6,519,000	\$7,262,000
Proposed for later transmission:		
For pay act costs authorized by Public Law 85-462.....	577,000	
For new program legislation: Federal administration of Ex-Servicemen's Unemployment Compensation Act of 1958, authorized by Public Law 85-848.....	53,500	
Total direct appropriation or estimate.....	7,149,500	7,262,000

Obligations by activity

Description	1959		1960		Change	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Veterans placement service.....	141	\$1,246,400	141	\$1,252,000		+\$5,600
2. Farm placement service.....	30	278,600	30	281,900		+3,300
3. Collection and interpretation of labor market information.....	104	815,600	104	835,600		+20,000
4. Assistance in maintaining public employ- ment services.....	111	928,600	111	935,300		+6,700
5. Unemployment insurance service.....	125	1,003,800	125	1,038,000		+34,200
6. Field guidance, financing and auditing of State operations.....	241	2,269,000	241	2,299,200		+30,200
7. Executive direction and management.....	24	230,400	24	235,600		+5,200
8. Central administrative services.....	65	377,100	65	384,400		+7,300
Total direct obligations.....	841	7,149,500	841	7,262,000		+112,500

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	841	841	None
Average number of all employees.....	801	813	+12
01 Personal services.....	\$5,878,300	\$5,980,500	+\$102,200
02 Travel.....	443,300	443,300	None
03 Transportation of things.....	9,700	11,700	+2,000
04 Communication services.....	125,500	132,500	+7,000
05 Rents and utility services.....	900	900	None
06 Printing and reproduction.....	144,200	144,200	None
07 Other contractual services.....	48,300	48,300	None
Services performed by other agencies.....	61,700	61,700	None
08 Supplies and materials.....	47,600	47,600	None
09 Equipment.....	17,000	17,000	None
11 Grants, subsidies, and contributions.....	371,200	372,500	+1,300
15 Taxes and assessments.....	1,800	1,800	None
Total direct obligations.....	7,149,500	7,262,000	+112,500

Summary of changes

Enacted appropriation-----	\$6, 519, 000
Proposed for later transmission:	
For increased pay costs under Public Law 85-462-----	577, 000
For new program legislation: Federal administration of Ex-Servicemen's Unemployment Compensation Act of 1958 authorized by Public Law 85-848-----	53, 500
Total estimated funds available in 1959-----	7, 149, 500
Estimate for 1960-----	7, 262, 000
Total change-----	+112, 500
<hr/>	
Mandatory items:	
Increase in postal rates (Public Law 85-426)-----	9, 000
Annualization of 1959 base:	
For 78 position authorized by the 2d sess., 85th Cong. for increased workloads-----	62, 000
For 10 new positions to finance Federal administration of Ex-Servicemen's Unemployment Compensation Act of 1958 authorized by Public Law 85-848-----	20, 500
Extra day of pay (261 days in 1959 and 262 days in 1960)----	21, 000
Administrative adjustments:	
Additional personal services cost in 1959 due to within-grade salary increases, reclassifications, and filling part of the new positions authorized with employees who were entitled to salaries above the minimum amount requested-----	+61, 344
Difference in personal services cost in 1959 made up by a reduction of 9.5 man-years of employment-----	-61, 344
Net change-----	+112, 500

STATEMENT OF ROBERT C. GOODWIN, DIRECTOR, BUREAU OF EMPLOYMENT SECURITY,
ON THE 1960 APPROPRIATION REQUEST FOR SALARIES AND EXPENSES

Mr. Chairman, the 1960 request for salaries and expenses of the Bureau provides for the same number of positions as is now available to the Bureau in 1959. However, we are requesting an increase of \$112,500 for several items where costs will be greater in 1960.

The Congress authorized new positions for the Bureau in the regular appropriation bill which was approved August 1, 1958, and in a supplemental appropriation approved August 27, 1958. Since these positions were not available for all of 1959, more money will be required in 1960. Therefore, \$62,000 of the \$112,500 increase requested for 1960 is to enable us to finance these positions for a full year.

As the committee knows, the legislation authorizing the new program of unemployment insurance for ex-servicement was approved August 28, 1958. The Congress adjourned without making an appropriation for Bureau expenses for supervising and administering the program. In addition to the six positions which are being transferred from work on the unemployment compensation for veterans program it has been necessary to establish 10 new positions in 1959. A supplemental appropriation request for \$53,500 to finance these new positions for this year has been approved by the House and has been favorably reported out by the Senate Committee on Appropriations. However, we will need \$74,000 for these positions for 1960. Also included in the increase of \$112,500 is \$20,500 to annualize the cost of the 10 new positions for the unemployment compensation for ex-servicemen's program. We will also need \$9,000 more for postage because postal rates have been increased, and \$21,000 more for salaries because there is one more day of work in 1960.

The workload of the Bureau continues to be extremely heavy. Although the character of the tasks being done is shifting somewhat. The experience with high unemployment in the last year has stirred up tremendous interest in unemployment insurance. We have received a very large number of inquiries from the State agencies with regard to legislative proposals. We are also receiving an unusually large number of requests for data on unemployment insurance from outside groups such as universities, employer groups, and labor unions. The number of congressional inquiries has increased.

The unprecedented claims load experienced during 1958 and the continuation of a relatively high level of unemployment during this fiscal year has placed unusual stress on reserve funds established to pay benefit costs. The total reserves of all States for benefit payments was \$8.7 billion at the beginning of calendar year 1958. By the end of the year the balance had dropped to \$6.9 billion. The trust fund reserves of most States are actuarially sound. In a few a major adjustment of tax rates and income will be needed. However, most States are interested in reviewing the actuarial soundness of their system. To achieve actuarial soundness in benefit reserves is by its nature a long-term project, and we will have to intensify our work with the States for a number of years on this problem.

As a result of the enactment of the Temporary Unemployment Compensation Act of 1958, a great deal of information is available about the people who use all of their regular unemployment insurance benefits and continue to be unemployed. Both the Bureau and the State agencies are making studies to determine such things as the characteristics of these workers, their occupations, the industries in which they work and the extent of their participation in the labor force. We are also doing further research on the adequacy of the weekly benefit amount paid under the State unemployment insurance laws to defray nondeferrable expenses of the claimant. A new research method is currently being developed which will enable larger claimant groups to be studied without increasing the cost of the analysis.

As I indicated earlier, in the past year there has been some shortcutting of the basic claimant interviewing procedures which are necessary to protect the system against abuse. Both Bureau and State technical and operating staff are working to get these safeguards restored. We have also planned operational analyses to improve and make more efficient the mass handling of benefit forms through the use of electronic data processing equipment. This kind of equipment offers opportunities for rapid handling of benefit payments and wage records, but its adoption must be carefully studied to insure that the advantages received offset the increased cost of the equipment.

Another important area of work is the perfecting of the administration of the new ex-servicemen's unemployment compensation program. There are many complications in this program that were not present in the unemployment compensation for veterans program. These arise from the relating of earnings in the Armed Forces to the provisions of the State unemployment insurance laws. We are working with the State agencies and the Defense Department to resolve the problems which have arisen.

Keeping abreast of the rapidly moving technological developments as they affect job requirements is a major problem affecting the placement of workers. The placement of workers in available jobs can be facilitated if good information is available on job content and work requirements. Steps have been taken to develop accurate and current information about the more than 30,000 jobs in the economy. This year, we arranged with four State agencies to set up an occupational research center in an important industrial area in each State. Also, we have established such a center here in the District of Columbia. These centers will be devoted entirely to a nationally coordinated program for bringing our occupational data up to date so that it will be more useful to all the State agencies, to Government and private agencies, and to industry.

We are continuing to give emphasis to improving the internal operations of local offices with respect to older workers. By last August there were 87 full-time specialists and 225 part-time specialists in services to older workers in the larger local offices. At the same time a total of 5,000 local office personnel, from receptionists to managers, have received training inservice to older workers that the Bureau had previously introduced into each State. The State agencies are still giving this training to their remaining staff.

The Bureau is continuing to work closely with the State agencies to improve placement techniques and to help offset the problems posed for older workers by reduced hiring activity. During the first 5 months that we had separate reporting, the July-November 1957 period, the placement of workers over 45 constituted 18.7 percent of all nonagricultural placements made. During the same 5 months in 1958, which covered part of the recession, 19.1 percent of all placements made were in the over-45 group. At this time we are receiving about 145,000 new applications for work every month from workers over 45 and we are making almost 100,000 placements a month for the same group.

During the next year the Employment Service will continue to emphasize the placement of handicapped job seekers. Because the more severely disabled require greater effort and the use of special methods of counseling and placement, we are cooperating closely with State rehabilitation agencies to better serve the relatively small numbers of the severely disabled who have particularly difficult employment problems.

One of the major problems facing us is the unemployment and underemployment of farmworkers. Because of the economic and technological changes in agricultural production and marketing, many tenant farmers, sharecroppers, and small individual farmers cannot subsist without some kind of outside employment.

As farms have become larger and more mechanized and the need for short-term intermittent labor during the planting and harvesting seasons has increased, there have been created a type of farm wage earner who depends on finding a series of successive short term jobs. Many of these workers are not successful in making such arrangements locally and must migrate to other areas seeking farm work or migrate to cities seeking industrial employment. A large number of these workers are unskilled in industrial employment and add to the already existing unemployment in the large cities.

Many of these people take their families with them when they seek farmwork in other areas. It is very difficult and often impossible to obtain necessary health and medical care since many of the areas to which they migrate are not properly equipped. Also, education for their school-age children is not available in many areas. Even where facilities are available, many States have residence requirements which bar migrants from education and other forms of assistance.

I wish to call to the attention of the committee the increasing public interest in the situation confronting these migratory workers. There has been widespread editorial comment, numerous documentary stories in newspapers and magazines, and an increasing number of States have established migratory committees to study the problem of migrants and to make recommended reforms. Also, an Advisory Committee headed by former Senator Frank Graham and including many distinguished citizens held public hearings in Washington last February on problems of people engaged in migrant farmwork. This committee has announced plans to continue its work of presenting factual information which will maintain public interest and make easier the work of social action committees and organizations which are equipped to take appropriate action.

We are involved in this problem since we are attempting to develop work opportunities for these migrants as well as to meet local seasonal farm labor requirements. We are currently working on some of these problems such as housing, wages, and transportation.

We have organized day haul programs which are designed to provide employment within commuting areas for some of the people who have been displaced, and who have moved into small communities and are available for part-time work. Day haul programs for these workers have been very effective in solving some of the intermittent seasonal labor requirements of large farmers. Also in the past several years we have been increasingly successful in assisting migrants to find a series of jobs in difficult communities as workers are needed to plan and harvest crops. Through our annual worker plan migratory workers have been scheduled to a series of jobs before they leave their homes.

One area which we are giving increased emphasis this year and next is the recruitment of high school and college youth for summer employment in agricultural work and food processing. For example, one of our more successful programs has been the recruitment of college youth from small communities in the south for summer work in Wisconsin and Illinois in field and plant jobs. We have been advised by two of the major food processors in the country that they will expand their employment of college youth this coming year. This type of employment program for high school and college youth sometimes means the difference between uninterrupted schooling and having to drop out of school because of insufficient funds. At the same time the program gives farmers a much needed labor supply. In Minnesota and Oregon, college youth have become the backbone of the seasonal labor force for some of the major food processing operations.

The Veterans Employment Service is continuing to improve services furnished veterans through the local employment offices. As you know Mr. Omohundro and his staff have been concentrating on improving the competence of both

Bureau and State agency employees dealing with the employment problems of veterans.

Mr. Omohundro is here today, and I am sure the committee will be interested in hearing from him about some of the things the Veterans Employment Service is doing and plans to do next year.

GENERAL STATEMENT

Mr. GOODWIN. We actually have five different appropriations to present to the committee at this time. The first one is the one on "Salaries and expenses" for the bureau.

The request this year provides for the same number of positions as we have for 1959. We are not asking for an increase in the number of positions.

We are, however, asking for an increase of \$112,500 for several items where the corresponding costs will be greater in 1960 than they were in 1959.

I would like to identify those, Mr. Chairman.

Senator HILL. In other words you are not asking for any additional personnel at all?

Mr. GOODWIN. That is right, sir.

Senator HILL. But you have several items where you have an increase?

Mr. GOODWIN. Yes.

Senator HILL. Give us those items and the reason for the increase.

Mr. GOODWIN. Of the \$112,500, \$82,500 represents funds that are needed to carry for the full year in 1960 the new positions that the Congress approved during 1959.

We also need \$9,000 for postage because of the increase in postal rates and \$21,000 more for salaries because of the item you were just discussing, the additional day of pay in 1960.

Our experience with the high rate of unemployment during the last year has spotlighted the strong points of the employment security program and at the same time it has developed some areas of weakness that we think need corrective action.

Our program for 1960 does not contemplate any expansion in total activity, but it does involve some shift in activity.

UNEMPLOYMENT INSURANCE

In the field of unemployment insurance, for instance, we are going to do more work to assure that the system is actuarially sound. What happened last year with the heavy drain put on the system has raised questions in a number of States about the actuarial soundness of their systems. We expect to do more work in cooperation with the States on that problem.

The larger States are getting more and more into the use of electronic equipment for keeping records and we expect to put more emphasis on working with the States on that.

We have a rather large job in administering the ex-servicemen's compensation program, which just started last October. So we will need to put a good deal more emphasis on that.

EMPLOYMENT SERVICE

In the field of employment service we are going to have to move quickly to keep abreast of some of the rapid technological changes

that are taking place in the labor market as they affect job requirements. We are going, of course, to continue to emphasize the placement services, especially those for older workers and handicapped groups.

That is a summary touching the high spots of the salaries and expenses appropriation request.

As I indicated at the start, it does not involve any additional personnel.

Senator HILL. I was interested in what you said about the old people. You and I know that is becoming more of a problem all the time.

Mr. GOODWIN. Yes, sir.

Senator HILL. What are you thinking there in terms of doing more to help them get located, to lead more useful lives, get jobs?

Mr. GOODWIN. We have had a program underway now for several years, Mr. Chairman. It started with some research we did, to learn more about the problem and the attitudes that were prevalent on the part of the employers about this problem.

OPERATING PROGRAM IN EFFECT

We have had an operating program with the States in effect now for about 2 years. What we are trying to do is to build up some specialized personnel in State agencies to deal with the problem and secondly, to train the interviewing and counseling personnel in the local offices in effective methods of handling the problem.

A good part of this, a very important part of the program, as far as the local offices are concerned, is teaching them techniques for selling employers. There are a number of myths as far as employers are concerned about the relative abilities of older workers; just as there were in the handicapped area when we got into that.

So we are trying to give the local offices the basic information by which they can sell employers on the fact that the older workers are as good, or better, than other workers so that we eliminate discrimination.

There are some misunderstandings widely held on insurance costs, for instance. A great many employers believe that it will cost them more on their retirement insurance if they hire older workers. That is not necessarily so.

We work and we have worked with some of the insurance companies and developed information which is being made available to the local offices to deal with this problem.

PLACING OLDER WORKERS

Now, there is one fact that stands out clearly. That is, if you do an adequate job in placing older workers in a local employment office it takes more time. It takes more time to develop job opportunities and it takes more time to work out the problem with the older worker.

Frequently that is because it is necessary for the older worker to make a shift in his occupation. He has been following one line of work for 20 years and he is laid off and for one reason or another he cannot get back; he has to shift to another occupation and that is not done easily, it takes time.

So that we are trying to get more time applied to the individual older worker as he comes into the local office. I would say this, although the results of this effort have not been sensational in terms of increases in the number of placements, there are two or three important points:

One is that we have improved a little bit in the percentage of older workers placed as it is related to the total placed in the last 2 years.

In other words, the percentage of older workers that are being placed now compared to the total is a little better than it was a couple of years ago.

So we are making some progress. Most of this improvement came in 1958, as I recall, but even in 1959, with some of the recessionary influences we had last year, it still held its own.

So we are making some progress.

Now, this, I think, covers the principal points on salaries and expenses. If you have any questions on that perhaps you might want to ask them now.

Senator HILL. Are there any questions on this "Salaries and expenses," Senator Byrd?

Senator BYRD. I believe not.

Senator HILL. You will be not hiring any more people?

Mr. GOODWIN. That is right.

Senator HILL. These are what you call automatic increases, due largely to acts of Congress and your effort to improve better hiring for your older people, things of that sort?

Mr. GOODWIN. Yes; that is right.

Senator BYRD. I have no questions, Mr. Chairman.

GRANTS TO STATES

APPROPRIATION ESTIMATE

"For grants in accordance with the provisions of the Act of June 6, 1933, as amended (29 U.S.C. 49-49n), for carrying into effect section 602 of the Servicemen's Readjustment Act of 1944, for grants to the States as authorized in title III of the Social Security Act, as amended (42 U.S.C. 501-503), including, upon the request of any State, the purchase of equipment, and the payment of rental for space made available to such State in lieu of grants for such purpose, for necessary expenses including purchasing and installing of air-conditioning equipment in connection with the operation of employment office facilities and services in the District of Columbia, and for the acquisition of a building through such arrangements as may be required to provide quarters for such offices and facilities in the District of Columbia and for the District of Columbia Unemployment Compensation Board, subject to the same conditions with respect to the use of these funds for such purposes as are applicable to the procurement of buildings for other State employment security agencies, and for expenses not otherwise provided for, necessary for carrying out title IV of the Veterans' Readjustment Assistance Act of 1952 (66 Stat. 684) and title XV of the Social Security Act, as amended (68 Stat. 1130), **[\$305,000,000]** **\$328,684,000**, of which **[\$10,000,000]** **\$15,000,000** shall be available only to the extent necessary to meet increased costs of administration resulting from changes in a State law or increases in the numbers of claims filed and claims paid or increased salary costs resulting from changes in State salary compensation plans embracing employees of the State generally over those upon which the State's basic grant (or the allocation for the District of Columbia) was based, which increased costs of administration cannot be provided for by normal budgetary adjustments: *Provided*, That notwithstanding any provision to the

contrary in section 302(a) of the Social Security Act, as amended, the Secretary of Labor shall from time to time certify to the Secretary of the Treasury for payment to each State found to be in compliance with the requirements of the Act of June 6, 1933, and, except in the case of Puerto Rico, Guam, and the Virgin Islands, with the provisions of section 303 of the Social Security Act, as amended, such amounts as he determines to be necessary for the proper and efficient administration of its unemployment compensation law and of its public employment offices: *Provided further*, That such amounts as may be agreed upon by the Department of Labor and the Post Office Department shall be used for the payment, in such manner as said parties may jointly determine, of postage for the transmission of official mail matter in connection with the administration of unemployment compensation systems and employment services by States receiving grants herefrom.

“In carrying out the provisions of said Act of June 6, 1933, the provisions of sections 303(a) (1) of the Social Security Act, as amended, relating to the establishment and maintenance of personnel standards on the merit basis, shall apply.

“None of the funds appropriated by this title to the Bureau of Employment Security for grants-in-aid of State agencies to cover, in whole or in part, the cost of operation of said agencies including the salaries and expenses of officers and employees of said agencies, shall be withheld from the said agencies of any States which have established by legislative enactment and have in operation a merit system and classification and compensation plan covering the selection, tenure in office, and compensation of their employees, because of any disapproval of their personnel or the manner of their selection by the agencies of the said States, or the rates of pay of said officers or employees.

Grants to States, next succeeding fiscal year: For making, after May 31 of the current fiscal year, payments to States under title III of the Social Security Act, as amended, and under the Act of June 6, 1933, as amended for the first quarter of the next succeeding fiscal year, such sums as may be necessary, the obligations incurred and the expenditures made thereunder for payments under such title and under such Act of June 6, 1933, to be charged to the appropriation therefor for that fiscal year.

【For an additional amount for “Grants to States for unemployment compensation and employment service administration”, \$20,600,000, of which \$14,200,000 shall be available only to the extent necessary to meet increased costs of administration resulting from changes in a State law or increases in the number of claims filed and claims paid or increased salary costs resulting from changes in State salary compensation plans embracing employees of the State generally over those upon which the State’s basic grant (or the allocation for the District of Columbia) was based, which increased costs of administration cannot be provided for by normal budgetary adjustments.】

Amounts available for obligation

Enacted appropriation or estimate:		
1959	-----	\$325, 600, 000
1960	-----	328, 684, 000

Obligations by activity

Description	1959	1960	Change
1. Unemployment compensation.....	\$178, 239, 000	\$185, 537, 000	+\$7, 298, 000
2. Employment service.....	87, 144, 000	90, 174, 000	+3, 030, 000
3. State administration.....	28, 595, 000	30, 251, 000	+1, 656, 000
4. Unemployment compensation for veterans and Federal employees.....	7, 422, 000	7, 722, 000	+300, 000
5. Contingency fund.....	24, 200, 000	15, 000, 000	−9, 200, 000
Total direct and authorized obligations.....	325, 600, 000	328, 684, 000	+3, 084, 000

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	159	159	(1)
Average number of all employees.....	153	153	(1)
01 Personal services.....	\$868,800	\$872,100	+\$3,300
02 Travel.....	2,000	2,000	(1)
04 Communication services.....	19,000	19,000	(1)
05 Rents and utilities.....	145,000	145,000	(1)
06 Printing and reproduction.....	5,000	5,000	(1)
07 Other contractual services.....	8,000	8,000	(1)
08 Supplies and materials.....	9,000	9,000	(1)
09 Equipment.....	7,000	7,000	(1)
11 Grants, subsidies, and contributions.....	324,536,000	327,616,700	+3,080,700
15 Taxes and assessments.....	200	200	(1)
Total direct obligations.....	325,600,000	328,684,000	+3,084,0

¹ None.*Summary of Changes*

Enacted appropriation.....	\$325,600,000
Estimate for 1960.....	328,684,000
Total change.....	+3,084,000

MANDATORY ITEMS

1. Increase in the average State salary rate from \$4,279 in 1959 to \$4,425 in 1960..... +8,285,000¹
The salaries are for State employees and the increase is mandatory because the salary rates are prescribed under State compensation plans which meet Federal standards. The increase is based on experience in 1958 and prior years. Half the increase (\$73 per employee) is for within-grade salary increments which are mandatory after prescribed periods of satisfactory service. The other half of the increase is for the cost of State compensation plan changes to be made in 1959. In 1959 these changes can be financed out of the contingency fund; in 1960 they become a mandatory salary cost item and are part of the regular budget request. The latest rate reported by the States was \$4,268 for November 1958.
2. Workload increases due to growth in program coverage..... +1,724,800¹
As a result of growth in program coverage workloads will increase in the tax collection and wage record functions. The increases in the number of employer status determinations (48,000), employer accounts (294,000), field audits (4,000), and collections and refunds are due to the growth in the number of covered employers. The increase in the number of wage records (2,975,000) is due to a rise in the number of covered workers.
3. Workload increase due to higher number of benefit payments.... +723,500¹
The increase in the overpayment and fraud function is for prevention and detection of improper benefit payments and is related to the high number of benefit payments in 1958 and 1959. In 1958 there were 38,000,000, or 70 percent, more benefit payments than in 1957, and in 1959 they are expected to continue at this high level. The increase in overpayment and fraud work lags behind the increase in benefit payments.

4. Workload increase in the Federal unemployment compensation programs due to higher benefit payments----- +\$458, 700

The cost of administration of these programs is related to the amount of benefit payments: \$70,000,000 in 1960 for ex-servicemen; \$57,000,000 for Federal employees; and \$8,000,000 for Korean veterans. The cost of the ex-servicemen program increases while the other two decrease. In 1959 a part of the funds needed for the ex-servicemen program has been transferred from the other two programs; the remainder will be derived from the contingency fund.

5. Higher cost of rent of premises----- +1, 234, 000
- The increase is based on experience and is due mainly to the higher cost of office space.

6. Increase due to equipment obsolescence----- +700, 000

The increase is for replacing obsolete equipment. Approximately 3 percent of the equipment would be replaced. Replacement of obsolete equipment is being deferred in 1959.

PROGRAM INCREASE ITEM

7. Increase in cost due to greater normality in operations----- +2, 165, 000

In 1958 there had to be substantial curtailment in normal operations because of inability to recruit enough staff for the large rise in unemployment claims and benefit workloads, and to recruit it fast enough to keep pace with the rise in workloads. In 1959 and 1960 the situation is expected to be better, but curtailment in normal operations will still be necessary. The curtailment rate in 1959 is estimated at 5.1 percent of total man-years; in 1960 it is estimated at 4.3 percent. This change provides for gradual progress toward financing State administration of the program in accordance with Bureau standards.

PROGRAM DECREASE ITEMS

8. Workload changes due to improved economic outlook----- -3, 007, 000

The workload decreases in initial claims taking (271,000), continued claims taking (2,373,000), monetary determinations (365,000), benefit payments (3,575,000), new applications (600,000), and experience rating are related to the drop in average weekly insured unemployment from 2,204,000 in 1959 to 2,100,000 in 1960. Nonmonetary determinations (95,000), and benefit appeals (14,000) are expected to increase because the number of contested claims usually goes up when job opportunities become more plentiful. Because of high unemployment the number of contested claims was disproportionately low in 1958, and is expected to continue at this level in 1959.

9. Decrease in the contingency fund----- -9, 200, 000

The size of the contingency fund has been reduced because less unemployment is expected in 1960.

Net change----- +3, 084, 000

Grants to States for unemployment compensation and employment service administration—Budget allotments, fiscal years 1957, 1958, and estimates for fiscal years 1959 and 1960

	Fiscal year 1957	Fiscal year 1958	Festimate, fiscal year 1959	Estimate, fiscal year 1960
Total.....	¹ \$251,978,397	¹ \$295,387,929	¹ \$329,730,903	² \$328,684,000
Alabama.....	3,553,473	4,002,840	4,263,416	4,377,185
Alaska.....	956,588	1,176,591	1,288,457	1,322,840
Arizona.....	2,623,792	3,194,048	3,402,064	3,492,848
Arkansas.....	2,489,563	2,952,279	3,247,617	3,334,280
California.....	26,204,962	32,503,374	32,903,013	33,781,031
Colorado.....	2,145,234	2,718,367	2,940,646	3,019,117
Connecticut.....	3,748,134	5,011,955	4,897,901	4,936,200
Delaware.....	583,265	672,092	767,152	787,623
District of Columbia.....	1,850,734	2,081,772	2,397,240	2,461,210
Florida.....	4,555,280	5,114,616	5,613,666	5,763,467
Georgia.....	3,656,408	4,047,905	4,331,682	4,447,273
Guam.....		30,000	36,908	37,893
Hawaii.....	824,478	924,652	918,272	942,776
Idaho.....	1,393,436	1,560,093	1,779,687	1,827,178
Illinois.....	10,808,466	13,660,979	13,434,851	13,793,360
Indiana.....	4,565,540	5,148,538	5,335,221	5,477,591
Iowa.....	2,191,685	2,504,089	2,641,661	2,712,154
Kansas.....	2,053,340	2,222,743	2,346,566	2,479,184
Kentucky.....	2,987,161	3,348,588	3,666,841	3,764,691
Louisiana.....	3,103,622	3,427,535	3,576,482	3,671,921
Maine.....	1,303,820	1,497,634	1,606,465	1,649,334
Maryland.....	4,399,363	5,120,282	4,764,262	4,891,396
Massachusetts.....	10,053,053	11,427,120	11,530,006	11,837,685
Michigan.....	12,778,195	14,929,357	15,731,691	16,151,492
Minnesota.....	3,358,589	4,203,897	4,548,282	4,669,653
Mississippi.....	2,487,563	2,839,021	3,336,273	3,425,302
Missouri.....	4,491,972	5,212,410	5,298,524	5,439,915
Montana.....	1,257,614	1,412,384	1,695,175	1,648,009
Nebraska.....	1,175,877	1,220,391	1,371,227	1,497,818
Nevada.....	875,459	1,002,100	1,143,819	1,174,342
New Hampshire.....	1,024,160	1,273,642	1,320,180	1,355,499
New Jersey.....	10,558,875	11,597,353	12,554,721	12,889,744
New Mexico.....	1,486,853	1,546,171	1,721,036	1,766,962
New York.....	36,122,487	43,060,173	44,220,488	45,400,513
North Carolina.....	4,545,852	5,308,067	5,726,650	5,879,466
North Dakota.....	902,076	971,400	1,122,080	1,152,023
Ohio.....	10,231,259	13,753,631	13,844,826	14,214,276
Oklahoma.....	2,864,987	3,525,275	3,725,250	3,824,658
Oregon.....	3,199,451	3,841,876	3,720,110	3,819,381
Pennsylvania.....	19,874,080	23,222,670	23,231,234	23,851,160
Puerto Rico.....	979,905	1,039,859	1,071,928	1,100,532
Rhode Island.....	2,097,910	2,777,318	2,694,184	2,766,078
South Carolina.....	2,786,233	3,186,813	3,234,023	3,320,323
South Dakota.....	666,306	720,760	856,480	879,335
Tennessee.....	3,736,696	4,185,290	4,056,278	4,164,520
Texas.....	9,974,556	11,251,639	11,933,958	12,252,416
Utah.....	1,880,201	2,076,384	2,320,770	2,382,700
Vermont.....	822,155	952,363	999,148	1,025,810
Virginia.....	2,352,973	2,588,704	2,875,583	2,952,318
Virgin Islands.....	47,371	63,924	76,978	79,032
Washington.....	4,998,933	5,651,289	5,756,578	5,910,192
West Virginia.....	1,969,181	2,312,126	2,437,482	2,502,526
Wisconsin.....	3,514,180	4,231,842	4,484,665	4,604,338
Wyoming.....	712,597	763,989	851,206	873,920
States total.....	249,785,869	295,064,140	305,470,903	313,622,400
Contingency.....			24,200,000	15,000,000
Railroad Retirement Board.....	210	155	100	100
Veterans' Administration.....	32,087	49,395	59,900	61,500
Subtotal.....	249,818,166	295,113,690		
BLS contractual service.....		60,000		
Unallotted balance.....	³ 2,160,231	214,239		
Total.....	251,978,397	295,387,929	329,730,903	328,684,000

¹ Includes reallocation of unencumbered funds in State agencies from prior year: 1957, \$1,909,734; 1958, \$2,412,294; 1959, \$4,130,903. Includes reimbursement of \$68,663 in fiscal year 1957. Postage prorated.

² Estimate based on fiscal year 1959 estimated allocations.

³ Includes \$2,000,000 contingency fund and \$160,231 unobligated funds.

Estimated Federal unemployment tax receipts and Federal funds allocated to States for administration during fiscal year 1958; and excess tax collection distributed on July 1, 1958

[In thousands]

	Federal unemployment tax collection	Federal funds for operating expenses of State	Ratio of funds for operating expenses to tax collections (percent)	1958 Reed Act excess tax collections distributed, July 1, 1958	Total Federal funds made available to States (col. 2 plus col. 4)	Ratio of funds available to tax collections (col. 5 plus col. 1)
Total.....	\$332, 644	\$295, 388	88. 8	\$33, 453	\$328, 841	98. 9
Alabama.....	4, 080	4, 007	98. 2	401	4, 408	108. 0
Alaska.....	402	1, 178	293. 0	46	1, 224	304. 5
Arizona.....	1, 650	3, 198	193. 8	171	3, 369	204. 2
Arkansas.....	1, 515	2, 956	195. 1	174	3, 130	206. 6
California.....	31, 474	32, 539	103. 4	3, 284	35, 823	113. 8
Colorado.....	2, 667	2, 721	102. 0	262	2, 983	111. 8
Connecticut.....	6, 510	5, 017	77. 1	655	5, 672	87. 1
Delaware.....	1, 140	673	59. 0	118	791	69. 4
District of Columbia.....	1, 700	2, 084	122. 6	177	2, 261	133. 0
Florida.....	6, 480	5, 120	79. 0	640	5, 760	88. 9
Georgia.....	5, 400	4, 052	75. 0	534	4, 586	84. 9
Guam.....		30			30	
Hawaii.....	780	926	118. 7	83	1, 009	129. 4
Idaho.....	774	1, 562	201. 8	87	1, 649	213. 0
Illinois.....	23, 982	13, 676	57. 0	2, 359	16, 035	66. 9
Indiana.....	9, 657	5, 154	53. 4	952	6, 106	63. 2
Iowa.....	3, 450	2, 507	72. 7	340	2, 847	82. 5
Kansas.....	2, 955	2, 225	75. 3	292	2, 517	85. 2
Kentucky.....	3, 780	3, 352	88. 7	361	3, 713	98. 2
Louisiana.....	4, 635	3, 431	74. 0	459	3, 890	83. 9
Maine.....	1, 545	1, 499	97. 0	153	1, 652	106. 9
Maryland.....	5, 535	5, 126	92. 6	551	5, 677	102. 6
Massachusetts.....	11, 775	11, 434	97. 1	1, 203	12, 637	107. 3
Michigan.....	17, 340	14, 946	86. 2	1, 702	16, 648	96. 0
Minnesota.....	5, 325	4, 209	79. 0	539	4, 748	89. 2
Mississippi.....	1, 740	2, 842	163. 3	172	3, 014	173. 2
Missouri.....	7, 860	5, 218	66. 4	775	5, 993	76. 2
Montana.....	855	1, 414	165. 4	94	1, 508	176. 4
Nebraska.....	1, 650	1, 222	74. 1	163	1, 385	83. 9
Nevada.....	666	1, 003	150. 6	70	1, 073	161. 1
New Hampshire.....	1, 132	1, 275	112. 6	112	1, 387	122. 5
New Jersey.....	13, 554	11, 610	85. 7	1, 338	12, 948	95. 5
New Mexico.....	1, 110	1, 548	139. 5	120	1, 668	150. 3
New York.....	42, 717	43, 107	100. 9	4, 253	47, 360	110. 9
North Carolina.....	6, 240	5, 314	85. 2	617	5, 931	95. 0
North Dakota.....	510	972	190. 6	51	1, 023	200. 6
Ohio.....	21, 900	13, 769	62. 9	2, 209	15, 978	73. 0
Oklahoma.....	2, 985	3, 529	118. 2	297	3, 826	128. 2
Oregon.....	3, 255	3, 846	118. 2	343	4, 189	128. 7
Pennsylvania.....	24, 105	23, 248	96. 4	2, 544	25, 792	107. 0
Puerto Rico.....		1, 041			1, 041	
Rhode Island.....	1, 944	2, 780	143. 0	201	2, 981	153. 3
South Carolina.....	2, 961	3, 190	107. 7	292	3, 482	117. 6
South Dakota.....	516	722	139. 9	51	773	149. 8
Tennessee.....	4, 845	4, 190	86. 5	480	4, 670	96. 4
Texas.....	14, 310	11, 264	78. 7	1, 413	12, 677	88. 6
Utah.....	1, 278	2, 079	162. 7	134	2, 213	173. 2
Vermont.....	570	953	167. 2	57	1, 010	177. 2
Virginia.....	5, 226	2, 592	49. 6	516	3, 108	59. 5
Virgin Islands.....		64			64	
Washington.....	5, 328	5, 658	106. 2	532	6, 190	116. 2
West Virginia.....	3, 240	2, 315	71. 5	321	2, 636	81. 4
Wisconsin.....	7, 140	4, 236	59. 3	705	4, 961	49. 2
Wyoming.....	456	765	167. 8	50	815	178. 8

Data on State unemployment trust fund balance, tax collections, and benefit payments on a calendar year basis

State	Column 1	Column 2	Column 3	Column 4
	State unemployment trust fund balance as of Dec. 31, 1958 (in thousands)	Average annual tax collections 1954-58 (in thousands)	Average annual benefit payments 1954-58 (in thousands)	Ratio of trust fund balance to average annual benefit payments (col. 1÷col. 3)
United States.....	\$6,952,711	\$1,364,709	\$2,000,893	3.47
Alabama.....	68,508	15,249	19,294	3.40
Alaska.....	14,050	4,293	6,823	.59
Arizona.....	58,854	6,828	5,164	11.40
Arkansas.....	39,974	6,604	9,009	4.44
California.....	837,236	145,080	165,321	5.06
Colorado.....	72,538	4,629	6,242	11.62
Connecticut.....	185,156	25,086	41,364	4.48
Delaware.....	8,610	2,345	4,683	2.84
District of Columbia.....	58,192	3,677	4,815	12.09
Florida.....	85,125	12,799	15,348	5.55
Georgia.....	139,456	20,394	23,927	5.83
Hawaii.....	23,227	2,636	3,200	7.26
Idaho.....	32,526	4,224	5,686	5.72
Illinois.....	360,549	66,168	113,947	3.16
Indiana.....	167,094	30,251	48,708	3.43
Iowa.....	113,191	6,602	9,050	12.62
Kansas.....	81,174	10,233	12,187	6.66
Kentucky.....	100,271	21,627	33,886	2.96
Louisiana.....	146,190	17,199	17,067	8.57
Maine.....	35,449	7,756	10,657	3.33
Maryland.....	76,603	15,748	29,750	2.57
Massachusetts.....	258,687	68,756	74,018	3.49
Michigan.....	² 198,098	84,126	164,239	1.21
Minnesota.....	83,103	15,010	28,293	2.94
Mississippi.....	31,167	7,172	10,585	2.94
Missouri.....	205,467	22,336	31,485	6.53
Montana.....	35,641	3,846	6,195	5.75
Nebraska.....	37,816	4,034	5,814	6.50
Nevada.....	16,724	4,342	4,888	3.42
New Hampshire.....	22,242	6,147	6,821	3.26
New Jersey.....	358,592	82,830	124,441	2.88
New Mexico.....	41,591	4,306	3,953	10.52
New York.....	1,121,588	222,163	294,073	3.81
North Carolina.....	169,067	26,565	33,810	5.00
North Dakota.....	9,138	2,298	3,006	3.04
Ohio.....	411,960	50,860	121,693	3.39
Oklahoma.....	44,539	8,548	12,365	3.60
Oregon.....	28,002	16,508	26,711	1.05
Pennsylvania.....	126,249	140,073	236,354	.53
Rhode Island.....	25,534	17,222	18,632	1.37
South Carolina.....	71,834	10,992	12,975	5.54
South Dakota.....	14,525	1,348	1,492	9.74
Tennessee.....	73,514	25,012	35,656	2.06
Texas.....	265,426	22,401	32,664	8.13
Utah.....	37,732	5,041	5,684	6.64
Vermont.....	14,694	2,171	3,164	4.64
Virginia.....	79,922	8,365	14,146	5.65
Washington.....	197,081	36,773	40,681	4.84
West Virginia.....	41,271	10,475	21,970	1.88
Wisconsin.....	222,886	23,901	36,412	6.12
Wyoming.....	14,648	1,658	2,550	5.74

¹ Includes \$8,275,070 in loans of which \$5,635,000 was received in 1958.

² Includes \$113,000,000 loan received in August 1958.

LABOR-HEALTH, EDUCATION, WELFARE APPROPRIATIONS

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	Actual fiscal year 1954	Actual fiscal year 1955	Actual fiscal year 1956	Actual fiscal year 1957	Actual fiscal year 1958	Estimate, fiscal year 1959	Estimate, fiscal year 1960
1. Federal unemployment tax collections:							
(a) Gross collections (covered into Treasury)	\$275, 279, 278. 00	\$287, 025, 881. 21	\$324, 023, 606. 58	\$329, 923, 653. 38	\$337, 500, 000. 00	\$332, 000, 000	\$344, 000, 000
(b) Less refund for overpayment and other adjustments	-2, 329, 282. 00	-2, 246, 752. 00	-2, 295, 787. 00	-2, 764, 527. 00	1 -3, 868, 227. 00	-2, 502, 479	-2, 870, 000
(c) Net collections	272, 949, 996. 00	284, 779, 129. 21	321, 727, 819. 58	327, 159, 126. 38	2 333, 631, 773. 00	2 329, 497, 521	2 341, 130, 000
2. Employment security administrative expenditures:							
(a) Department of Labor:							
(i) Grants to States	202, 091, 440. 00	191, 293, 247. 00	233, 438, 000. 00	247, 050, 093. 00	290, 376, 346. 00	4 322, 182, 000	4 324, 367, 000
(ii) Federal	4, 944, 775. 00	5, 000, 984. 00	5, 416, 000. 00	5, 479, 586. 00	3 6, 206, 600. 00	4 6, 703, 000	4 7, 252, 000
Labor Department total	207, 036, 215. 00	196, 294, 231. 00	238, 854, 000. 00	252, 529, 679. 00	296, 582, 946. 00	328, 885, 000	331, 619, 000
(b) Treasury Department:							
(i) Treasurer, United States	200. 00	200. 00	150. 00	142. 00	152. 00		
(ii) Bureau of Accounts	12, 192. 00	15, 925. 25	19, 176. 44	20, 496. 06	17, 473. 73		
(iii) Internal Revenue Service	1, 613, 382. 00	1, 691, 576. 00	1, 823, 099. 00	3, 413, 089. 00	3, 577, 219. 00		
(iv) Bureau of Public Debt	500. 00	500. 00	500. 00	500. 00	500. 00		
Treasury Department total	1, 626, 274. 00	1, 708, 201. 25	1, 842, 925. 44	3, 434, 227. 06	3, 595, 344. 73	3, 899, 000	3, 899, 000
Total employment security administrative expenditures	208, 662, 489. 00	198, 002, 432. 25	240, 696, 925. 44	255, 963, 906. 06	300, 178, 291. 00	332, 784, 000	335, 518, 000
3. Excess of collection over expenditures	64, 287, 507. 00	86, 776, 696. 96	81, 030, 894. 14	71, 195, 220. 32	33, 453, 482. 00	-3, 286, 479	5, 612, 000
4. Distribution of excess (in unemployment insurance trust fund):							
(a) Amount credited to Federal account	64, 287, 507. 00	86, 776, 696. 96	47, 654, 863. 16	None	None	None	5, 612, 000
(b) Amount credited to State accounts	None	None	33, 376, 030. 98	71, 195, 220. 32	33, 453, 482. 00	None	None
5. Federal account in unemployment insurance trust fund:							
(a) Balance at beginning of year		64, 287, 507. 00	148, 840, 086. 75	200, 000, 000. 00	205, 507, 800. 00	202, 189, 975	22, 900, 000
(b) Administrative expenses, Bureau of Employment Security							
(c) Excess credited (line 4(a) above)		+86, 776, 696. 96	+47, 654, 863. 16	None	3 -6, 078, 600. 00	3 +6, 078, 600	+5, 612, 000
(d) Interest earned		+775, 882. 79	+3, 505, 050. 09	+5, 137, 799. 64	+5, 395, 775. 00	None	+5, 600, 000
(e) Advances to States repaid				+3, 000, 000. 00	+14, 000, 000. 00	+5, 600, 000	
(f) Advances made to States				+2, 630, 000. 00	7 -16, 635, 000. 00		
(g) Balance at end of year	64, 287, 507. 00	148, 840, 086. 75	200, 000, 000. 00	205, 507, 799. 64	202, 189, 975. 00	8 -191, 000, 000	34, 112, 000
6. Advances outstanding at end of year						9 196, 265, 000	

¹ Includes \$1,058,114 under estimate for fiscal year 1957.² Reported by Treasury Department in the President's budget, p. 845.³ Includes \$6,078,600 withdrawn from Federal unemployment account during fiscal year 1958 for Bureau of Employment Security expenses and replaced in that account on July 1, 1958.⁴ Based on the President's 1960 budget request.⁵ Alaska.⁶ Oregon.⁷ Alaska, \$2,635,000; Oregon, \$14,000,000.⁸ Michigan, \$113,000,000; Pennsylvania, \$75,000,000; Alaska, \$3,000,000.⁹ Michigan, \$13,000,000; Pennsylvania, \$75,000,000; Alaska, \$8,265,000.

PREPARED STATEMENT

Senator HILL. Suppose you address yourself to the next item, Mr. Goodwin.

Mr. GOODWIN. The next item has to do with "Grants to States."

With your permission, Senator Hill, I will file my prepared statement for the record.

(The statement referred to follows:)

STATEMENT OF ROBERT C. GOODWIN, DIRECTOR, BUREAU OF EMPLOYMENT SECURITY
ON THE 1960 APPROPRIATION REQUEST FOR GRANTS TO STATES FOR UNEMPLOYMENT
COMPENSATION AND EMPLOYMENT SERVICE ADMINISTRATION

Mr. Chairman, we estimate that \$328,684,000 will be needed in 1960 for State administration of the unemployment compensation and employment service programs. This is an increase of \$3,084,000 over the \$325,600,000 appropriated for 1959.

We have estimated that in 1960 insured unemployment will decline somewhat from 1959 levels, and will average about 2,100,000 per week. The claims and benefit payment workloads in the budget are related to that level of insured unemployment. Also except for a reduction in the number of new job applications, the basic employment service workloads will be approximately the same in 1960 as in 1959.

In preparing the budget requests which we are discussing today we have estimated that the uptrend in economic activity will continue at a steady but moderate rate in 1960. We have also estimated that this expansion will gradually reduce the volume of insured unemployment.

It is always difficult to predict precisely what the future economic developments will be. It is particularly difficult when the economy is beginning a new period of expansion, because the future speed of the recovery now underway cannot be determined. Our appropriation requests for 1960 are those which will be required in a moderately expanding economy with developing job opportunities, and gradually declining unemployment. In the event that insured unemployment declines and claims workloads are somewhat lower than have been estimated, job opportunities should be more plentiful. In such a situation, the employment service workloads in the budget would be too low.

The net increase of \$3,084,000 is composed of cost increases amounting to about \$15.3 million, which are offset by decreases amounting to about \$12.2 million. The increases are due mainly to higher State salaries and other cost increases which are largely beyond the control of the Bureau and the State agencies, and to greater coverage of the program. The decreases are related to the improvement in the economy anticipated for 1960.

The largest increase in cost—\$8.3 million—is due to an increase in the average State salary rate from \$4,279 in 1959 to \$4,425 in 1960. The salary rates are prescribed under State compensation plans, and the rates in this program must be comparable to the salaries paid to other employees in the same State doing similar work.

The increase is based on experience in 1958 and prior years. In part, the increase is for within-grade salary increments which, in most States, are mandatory after prescribed periods of satisfactory service. Some of the increase is for the cost of State compensation plan changes to be made in 1959. In 1959 these compensation plan changes can be financed out of the contingency fund. In 1960, however, they must be made part of the salary rate used in the base budget request.

Costs will also rise in 1960 by about \$1.7 million because a larger number of employers and workers are expected to be covered by the program. The greater coverage is due to economic and labor force growth, and economic recovery—and its effect will be to increase workloads in the tax collection and wage record functions. As a result of these factors the State agencies will be required to make more employer status determinations, process more employer tax returns, process more employee wage items, audit the tax and wage records of more employers, and process more cases involving tax delinquency and overpayment of taxes.

The other increases over 1959 costs amounting to about \$3.1 million are needed because—

(1) Rents of premises continues to go up in cost. As leases are renewed the State agencies must pay at current rates which are usually higher than when the lease was last negotiated.

(2) Replacement of wornout and obsolete equipment will cost about \$1.5 million in 1960. The value of the equipment in the State agencies is estimated at over \$50 million. Thus, replacement in 1960 will be at the rate of only 3 percent of the value of the equipment. The States were allocated only \$800,000 for equipment purchases in 1959.

(3) There will be more work in the function concerned with prevention and detection of improper benefit payments. A substantial part of the work in this function involves cross checking benefit payments and reports of wages. A time lag is involved before this check can be made.

(4) As a result of legislation enacted last August, there will be more work in paying Federal unemployment compensation benefits. The new program of unemployment compensation for ex-servicemen will be in operation for 12 months in 1960, as compared to 8 months in 1959.

About \$2.2 million will also be needed in 1960 for resuming operating practices which are necessary to prevent the misuse of Federal and State benefit funds. As I mentioned in my general statement, the State agencies were forced to curtail some of these operations during the recession in order to cope with the rapid rise in unemployment claims and benefit payments. Now such functions as the testing of claimants' eligibility for benefits, informing claimants of their rights and responsibilities under the State laws, and other functions required to prevent the misuse of benefit funds must be brought to maximum operating effectiveness as rapidly as possible.

Costs are expected to decrease by about \$3 million in the claims and benefit payment functions. Because of the improved economic outlook for 1960, and the anticipated drop in insured unemployment, it is expected that the State agencies will need to take fewer claims, make fewer benefit payments, and make fewer entries on employer experience rating records. However, when job opportunities become more plentiful, the number of contested claims usually goes up. More such cases will therefore have to be handled in 1960, and more appeals will have to be heard.

The request for the contingency fund was reduced by about \$9.2 million because we think that with insured unemployment declining in 1960 the demands on this fund should not be as great as in 1959.

GENERAL STATEMENT

Mr. GOODWIN. As you know, the "Grants to States" appropriation is closely related to economic conditions. You will recall when we were here at this time last year insured unemployment was at its peak. It is at a considerably lower level today and the situation is gradually getting better.

The recovery in unemployment has lagged behind the recovery in other sectors of the economy and currently unemployment levels are still much higher than they were before the recession.

You may be interested in some of the recent workload developments. Between January and March insured unemployment dropped from 2½ million to 2.1 million.

At the same time there has been a significant increase in recent months in the employment service workloads. For instance, non-agricultural placements were at an annual rate of 5,600,000 in January, 6 million in February, and 6½ million in March.

The current level is about 18 percent higher than the \$5½ million estimate which was contained in the 1960 appropriation request.

Employment-service workload estimates in the appropriation request assumed no changes in the 1959 level. In the light of the most recent experience it is certain that workloads will be higher in 1960 than we estimated earlier.

The cost of financing these additional workloads will be offset by savings derived from decreases in claims and benefit workloads below those used in the budget request.

PROGRAM COST

The State administration of the unemployment compensation and employment-service programs is expected to cost \$328,684,000 in 1960. This is an increase of \$3,084,000 over the \$325,600,000 which was appropriated for 1959. There are increases amounting to about \$15,300,000 due to greater coverage of the program and the higher State salaries and other costs and increases which are largely beyond the control of the Bureau or the States.

These increases are offset by decreases amounting to \$12,200,000 which are related to improvement in the economy which is anticipated for 1960.

Senator HILL. These funds come out of the Treasury, but they are reimbursable, are they not, from the tax?

Mr. GOODWIN. We have the Federal tax, Mr. Chairman, which brings in the amount of money, or it has been bringing in more. The appropriations have been getting pretty close to the total amount.

Senator HILL. Up to date we have not had a deficit, have we?

Mr. GOODWIN. That is right.

Senator HILL. Since the tax is designed to provide the amount necessary.

Mr. GOODWIN. That is right.

Senator HILL. In other words, the income from the tax has reimbursed the Federal Government for all the expenditures?

Mr. GOODWIN. That is right.

I thought I might identify for you, briefly here, the increases——

Senator HILL. I think you had better identify them because it looks on the face of things you would not think you would be needing more money in 1960 than in 1959; that is in view of the trend of the last several months.

Mr. GOODWIN. Yes, sir.

SALARY RATES

The increase in State salaries costs—that may be the item you had in mind a minute ago, Senator Byrd—will cost about \$8,300,000. This is based on experience in 1958 and the prior years.

The salary rates paid in this program are prescribed under State compensation plans and they must be comparable to other State salaries, the State salaries paid to other employees doing similar work in the State.

The economic and labor force growth and economic recovery will cause a larger number of employers and workers to be covered by the program in 1960. This will increase workloads in the tax collection and wage record functions and will increase costs by about \$1,700,000.

We are expecting an increase in coverage of about 1,300,000 workers and some 62,000 additional employers to be brought under the program.

There will be higher costs for rent of premises, replacement of worn-out and obsolete equipment, more work in the function con-

cerned with prevention and detection of improper benefit payments and in the new program of unemployment compensation for ex-servicemen. These will increase costs about \$3,100,000.

To prevent the misuse of Federal and State benefit funds it is necessary to restore to the former level functions which the State agencies were forced to curtail during the recession in order to cope with the rapid rise in unemployment claims and benefit payments. This will cost about \$2,200,000.

What is involved there, Mr. Chairman and Senator Byrd, is that when unemployment is on the way up and there are very few employment opportunities, relatively few, the claims process can be short cut in certain respects without too much danger.

When the economy is going the other way and there are more job opportunities available, it is necessary to take more time in those interviews and some of the short cuts we made during the past year cannot be taken safely.

We estimate that the increase there will be about \$2,200,000.

The improved economic outlook for 1960 is expected to lower the volume of unemployment claims and benefit payments and this will lower costs by about \$3 million.

REDUCTION IN CONTINGENCY FUND

There is also a \$9,200,000 reduction in the contingency fund. We think that with the trend in unemployment insurance workloads expected to be downward in 1960, that not much of the contingency fund will be needed for workload purposes so that a saving of \$9,200,000 can be made from that source.

Now, those are the points that I wanted to make in connection with this.

Perhaps you would like to direct some questions on this now, Mr. Chairman.

Senator HILL. Senator Byrd.

Senator BYRD. No, thank you.

Senator HILL. All right, sir, what is your next item, Mr. Goodwin?

UNEMPLOYMENT COMPENSATION FOR VETERANS AND FEDERAL EMPLOYEES

APPROPRIATION ESTIMATE

"For payments to unemployed veterans and Federal employees, either directly or through payments to States, as authorized by title XV of the Social Security Act, as amended, \$160,800,000 and title IV of the Veterans' Readjustment Assistance Act of 1952, \$135,000,000.

Unemployment compensation for veterans and Federal employees, next succeeding fiscal year: For making, after May 31 of the current fiscal year, payments to States, as authorized by the title XV of the Social Security Act, as amended, and title IV of the Veterans' Readjustment Assistance Act of 1952, such amounts as may be required for payment to unemployed veterans and Federal employees for the first quarter of the next succeeding fiscal year, and the obligations and expenditures thereunder shall be charged to the appropriation therefor for that fiscal year."

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$120, 800, 000	\$135, 000, 000
Appropriation available from subsequent year.....	9, 246, 932	9, 246, 932
Appropriation available in prior year.....	-9, 246, 932	-9, 246, 932
Proposed for later transmission:		
For new program legislation.....		
Benefit payments authorized by the Ex-Servicemen's Unemployment Compensation Act of 1958, Public Law 85-848.....	41, 200, 000	
Total fund availability or estimate.....	162, 000, 000	135, 000, 000

Obligations by activity

Description	1959 amount	1960 amount	Change
1. Unemployment compensation for Federal employees.....	\$63, 000, 000	\$57, 000, 000	-\$6, 000, 000
2. Unemployment compensation for ex-servicemen.....	55, 000, 000	70, 000, 000	+15, 000, 000
3. Unemployment compensation for veterans.....	44, 000, 000	8, 000, 000	-36, 000, 000
Total direct obligation.....	162, 000, 000	135, 000, 000	-27, 000, 000

Obligations by objects

11. Grants, subsidies, and contributions:	
1959.....	\$162, 000, 000
1960.....	135, 000, 000
Change.....	-27, 000, 000

Summary of changes

Enacted appropriation.....	120, 800, 000
Proposed for later transmission: For payment of unemployment compensation to ex-servicemen as authorized by Public Law 85-848.....	41, 200, 000
Total estimated funds available in 1959.....	162, 000, 000
Estimate for 1960.....	135, 000, 000
Total change.....	-27, 000, 000

INCREASES

To provide for a full year's operation of unemployment compensation for ex-servicemen.....	+23, 800, 000
Increase in coverage: In 1960, separation of 715,000 servicemen eligible to file claims is expected; 578,000 separations are expected in 1959.....	+5, 300, 000
Increase of \$1 in the average weekly benefit payments to ex-servicemen and Federal employees.....	+4, 000, 000

DECREASES

Improvement in economic conditions is expected to reduce the number of claims and the duration of unemployment.....	-24, 500, 000
Termination of unemployment compensation for Korean veterans in 1960.....	-35, 600, 000
Net change.....	-27, 000, 000

PREPARED STATEMENT

Mr. GOODWIN. The next one has to do with the appropriation request for unemployment compensation for veterans and Federal employees. These are for benefit payments and not for administrative purposes.

Senator HILL. These are direct payments to the individual?

Mr. GOODWIN. That is right.

I will submit my prepared statement on this item for the record.

(The statement referred to follows:)

STATEMENT OF ROBERT C. GOODWIN, DIRECTOR, BUREAU OF EMPLOYMENT SECURITY,
ON THE 1960 APPROPRIATION REQUEST FOR UNEMPLOYMENT COMPENSATION TO
VETERANS AND FEDERAL EMPLOYEES

Mr. Chairman, it is estimated that \$135 million will be needed in 1960 for unemployment compensation payments to ex-servicemen, Korean veterans, and Federal employees. This is a decrease of \$25,800,000 from the \$160,800,000 available in 1959. When the budget was submitted we had estimated that \$162 million would be required in 1959. This included a supplemental request for \$41,200,000 submitted by the President. In acting on this request recently, the Congress reduced the supplemental appropriation to \$40 million.

When we made up the estimates for 1959 and 1960 for unemployment compensation for ex-servicemen we had no experience on which to base the estimates. As of now we have benefit payment expenditure reports from the States for the period from October 27 to March 31, 1959.

Title IV of the Veterans Readjustment Assistance Act of 1952, as amended, provides for the payment of unemployment compensation to veterans who served in the Armed Forces after June 26, 1950. This program terminates on January 31, 1960. As you know, compensation is payable at the uniform rate of \$26 per week in all States for not to exceed 26 weeks of unemployment. Also, if a veteran is entitled to unemployment compensation under any other State or Federal law, such compensation must be paid first, and only a supplemental amount to bring the compensation up to \$26 for the week is paid under this program. If the unemployed veteran has no other entitlement, the entire weekly benefit amount of \$26 is paid under this program.

We now estimate that \$44 million in benefit payments will be paid to those Korean veterans under this program in 1959. Since the program terminates on January 31, 1960, it will only be in effect for 7 months in fiscal year 1960. Also certain veterans formerly eligible under this program, and ex-servicemen being discharged currently, are eligible for benefits under the new program of unemployment compensation for ex-servicemen. It is therefore estimated that only \$8 million will be required in 1960, a reduction of \$36 million from estimated 1959 expenditures.

The unemployment compensation for veterans program is being replaced by the new program for ex-servicemen. In 1960 it is estimated that \$70 million will be required for the payment of unemployment compensation to ex-servicemen. This program, which was authorized by Public Law 848 of the 85th Congress, was approved on August 28, 1958, and 1960 will be its first full year of operation. In 1959 it will be in operation for 8 months. This new permanent program of unemployment compensation for ex-servicemen is similar in operation to the program for civilian employees of the Federal Government. Benefits are paid eligible ex-servicemen on the basis of cash and equivalent wages earned while serving in the Armed Forces. The benefits are paid in accordance with applicable provisions of the State unemployment insurance laws. Ex-servicemen who entered the Armed Forces after January 31, 1955, and those with earlier service whose latest separation from active duty occurs after October 27, 1958, are eligible for benefits under the provisions of the State unemployment insurance laws if they have served at least 90 continuous days and have been separated for reasons other than for bad conduct, or under conditions other than dishonorable.

For the payment of unemployment compensation to Federal employees in 1960 we are requesting \$57 million, a reduction of \$4,800,00 from the \$61,800,000 which is available in 1959. When the budget was submitted we had estimated that \$63 million would be required in 1959. Under this program unemployment benefits are paid to unemployed Federal employees as authorized by title XV of the Social Security Act, as amended. This program provides unemployment insurance protection for approximately 2.4 million Federal employees who are outside the jurisdiction of the State unemployment insurance laws.

Because of improvement in economic conditions in 1960, it is expected that there will be a small decrease in the number of claims filed for benefits, and a

decrease in the number of weeks for which each claimant will file. These decreases will be offset by a slight increase in the average weekly benefit rate in 1960. The net reduction in cost from 1959 is estimated to be \$4,800,000.

FUNDS AVAILABLE

Mr. GOODWIN. We are requesting here \$135 million for unemployment—

Senator HILL. That is a reduction of some \$25 million, \$25,800,000, under this year?

Mr. GOODWIN. That is right. It is a decrease from this year.

We have \$160,800,000 available in 1959.

More than half of this appropriation is for the new program of unemployment compensation for ex-servicemen and the rest of it is for unemployment compensation for Federal employees and a small amount to end the program for unemployment compensation for veterans.

The Veterans program is being replaced by the unemployment compensation for ex-servicemen program.

Senator BYRD. Which program was replaced?

Mr. GOODWIN. The new program is called unemployment compensation for ex-servicemen. The old program that is being replaced was the unemployment compensation for veterans. That program was established by the Congress to meet the Korean problem. Those men are technically known as veterans. Those that are coming out of the service now are not technically known as veterans.

That has meaning in terms of the provisions of the GI bill and other things.

So Congress replaced the old program with one for those now coming out of service and it is virtually on the same basis as the unemployment compensation for Federal employees program. It is recognized as a different type of Federal employment.

If there are no more questions on that—

Senator HILL. In other words, we have adopted a different program so far as the men who served in the Armed Forces are concerned?

Mr. GOODWIN. That is right, sir.

Senator HILL. The older program we called program for veterans. Many of them in that program as set up had served in some war, either World War I or World War II or the Korean War.

As we get further away from the war we have this new program which we call the program for ex-servicemen; is that right?

COMBINING OF PROGRAMS

Mr. GOODWIN. That is right.

There is one additional point I would like to make on this request. Last year Congress combined the appropriations on these particular programs and we would hope that the Congress would continue that—

Senator HILL. Congress did what?

Mr. GOODWIN. The appropriations were merged. Formerly they had been separate.

Senator HILL. That is right.

Mr. GOODWIN. This gives us a little leeway on the estimates. Sometimes our estimates are a little high on one and a little low on

the other. If there is one appropriation those problems can be met without coming back and bothering Congress for a transfer of the money or for an additional appropriation.

So we would hope that you would continue the single appropriation for this next year.

Senator BYRD. You are talking about combining the payments for ex-servicemen and ex-Federal employees?

Mr. GOODWIN. That is right.

Senator HILL. Well, really, what you mean is to combine the administration?

Mr. GOODWIN. To make one appropriation for the payment of benefits.

Senator HILL. And have both claims administered under the one administration?

Mr. GOODWIN. Yes. We actually have that in any event, but if you put these benefit payments in separate compartments then we have to come back to you if one of them is low even though another one may be high.

Senator HILL. You see, you do not want to earmark or differentiate these funds, but let them go in together?

Mr. GOODWIN. That is right.

Senator HILL. All right, sir. Are there any questions, Senator Byrd?

Senator BYRD. No, thank you.

MEXICAN FARM LABOR PROGRAM

APPROPRIATION ESTIMATE

“COMPLIANCE ACTIVITIES, MEXICAN FARM LABOR PROGRAM

“For expenses necessary to enable the Department to determine compliance with the provisions of contracts entered into pursuant to the Act of July 12, 1951, as amended, **[\$480,600]** \$873,000.”

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$480,600	\$873,000
Proposed for later transmission for pay act costs authorized by Public Law 85-462.....	39,000	-----
Total direct obligations or estimate.....	519,600	873,000

Obligations by activity

Description	1959		1960		Change	
	Posi- tion	Amount	Posi- tion	Amount	Posi- tion	Amount
Contract compliance and employer services.....	58	\$519,600	101	\$873,000	+43	+\$353,400
Total direct obligations.....	58	519,600	101	873,000	+43	+353,400

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	58	101	+43
Average number of all employees.....	64	109	+45
01 Personal services.....	\$378,900	\$628,100	+\$249,200
02 Travel.....	83,900	146,600	+62,700
03 Transportation of things.....	2,800	6,100	+3,300
04 Communication services.....	17,600	29,600	+12,000
05 Rents and utility services.....	5,300	10,600	+5,300
06 Printing and reproduction.....	2,000	3,000	+1,000
07 Other contractual services.....	3,800	6,500	+2,700
08 Supplies and materials.....	2,200	3,100	+900
09 Equipment.....	100	200	+100
11 Grants, subsidies, and contributions.....	22,600	38,400	+15,800
15 Taxes and assessments.....	400	800	+400
Total direct obligations.....	519,600	873,000	+353,400

Summary of changes

Enacted appropriation.....	\$480,600
Proposed for later transmission for pay act costs authorized by Public Law 85-462.....	39,000
Total estimated funds available in 1959.....	519,600
Estimate for 1960.....	873,000
Total change.....	+353,400

MANDATORY ITEMS

Increase in postal rates (Public Law 85-426).....	+1,200
Extra day of pay (for 261 days in 1959 and 262 days in 1960).....	+2,200

PROGRAM INCREASE ITEMS

Addition of 43 positions and related costs. There has been a corresponding decrease in "Salaries and expenses, Mexican farm labor program".....	+350,000
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In 1959, Congress made a direct appropriation for the activity entitled "Determining compliance with contract provisions." The purpose as stated in the House committee report was not to place "employees who are policing the program in the position of being dependent, upon fees paid by those policed, for their salaries," and authorized the financing of the balance of the program by transfer from the employer financed farm labor supply revolving fund.

The distribution of functions by activity in the 1959 budget submittal included 43 positions in addition to those in the activity "Determining compliance with contract provisions" that were performing compliance duties.

The change in the 1960 budget submittal is to rectify this situation and have all compliance activities paid by direct appropriation.

There is a corresponding decrease in "Salaries and expenses," Mexican farm labor program.

ADMINISTRATIVE ADJUSTMENTS

Addition of temporary employment in the field to provide more clerical assistance.....	+2,100
Adjustment in other object costs to provide for needed clerical assistance in the field.....	-2,100
Net change.....	+353,400

Summary of new positions

Organizational unit	Grade	Number	Gross cost
Regional offices:			
Agricultural employment specialist.....	GS-11.....	5	\$35, 150
Foreign labor service representative.....	GS-9.....	22	134, 488
Foreign labor service representative.....	GS-7.....	9	47, 440
Clerk stenographer.....	GS-5.....	1	4, 493
Statistical clerk.....	GS-5.....	1	4, 493
Clerk stenographer.....	GS-4.....	2	8, 091
Clerk typist.....	GS-4.....	1	3, 765
Clerk stenographer.....	GS-3.....	2	7, 301
Total.....		43	245, 221

NOTE.—There is a corresponding reduction for these 43 positions in “Salaries and expenses, Mexican farm labor program.”

APPROPRIATION ESTIMATE

“SALARIES AND EXPENSES, MEXICAN FARM LABOR PROGRAM

“For expenses, not otherwise provided for, necessary to carry out the functions of the Department of Labor under the Act of July 12, 1951 (65 Stat. 119), as amended, including temporary employment of persons without regard to the civil-service laws, **[\$1,550,000]** \$1,336,700, which shall be derived by transfer from the farm labor supply revolving fund: *Provided*, That reimbursement to the United States under agreements hereafter entered into pursuant to section 502 of the Act of October 31, 1949, as amended (7 U.S.C. 1462), shall include all expenses of program operations except those compliance activities separately provided for herein.”

Amounts available for obligation

	1959	1960
Authorized transfers or reimbursement:		
From Farm Labor Supply Revolving Fund:		
Authorized.....	\$1, 550, 000	\$1, 336, 700
Proposed for pay act costs authorized by Public Law 85-462.....	130, 000	-----
Total fund availability or estimate.....	1, 680, 000	1, 336, 700

Obligations by activity

Description	1959		1960		Change	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Determining Mexican labor requirements.....	6	\$44, 800	6	\$45, 100	-----	+\$300
2. Supplying Mexican labor requirements.....	206	1, 284, 100	163	938, 900	—43	—345, 200
3. Determining compliance with contract provisions.....					-----	
4. Farm labor analysis.....	4	28, 300	4	28, 400	-----	+100
5. Management and administrative services.....	30	220, 700	30	221, 500	-----	+800
6. Field direction.....	15	102, 100	15	102, 800	-----	+700
Total obligations.....	261	1, 680, 000	218	1, 336, 700	—43	—343, 300

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	261	218	-43
Average number of all employees.....	287	242	-45
01 Personal services.....	\$1,372,600	\$1,129,600	-\$243,000
02 Travel.....	111,900	49,200	-62,700
03 Transportation of things.....	8,700	7,200	-1,500
04 Communication services.....	50,200	40,300	-9,900
05 Rents and utilities.....	7,400	2,100	-5,300
06 Printing and reproduction.....	10,500	9,500	-1,000
07 Other contractual services.....	19,200	16,500	-2,700
08 Supplies and materials.....	11,600	10,700	-900
09 Equipment.....	5,800	5,700	-100
11 Grants, subsidies and contributions.....	79,900	64,100	-15,800
15 Taxes and assessments.....	2,200	1,800	-400
Total obligations.....	1,680,000	1,336,700	-343,300
Deduct from transfers authorized from the farm labor supply revolving fund.....	1,680,000	1,336,700	-343,300
Total direct obligations.....	0	0	0

Summary of changes

Authorized transfers or reimbursements.....	\$1,550,000
Proposed for later transmission: For pay act costs authorized by Public Law 85-462.....	130,000
Total estimated funds available in 1959.....	1,680,000
Estimate for 1960.....	1,336,700
Total change.....	-343,300

MANDATORY ITEMS

Increase in postal rates (Public Law 85-426).....	+2,700
Extra day of pay (261 days in 1959 and 262 days in 1960).....	+4,000

PROGRAM DECREASE ITEMS

Reduction of 43 positions in activity 2: "Supplying Mexican labor requirements".....	-350,000
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In 1959, Congress made a direct appropriation for the activity entitled "Determining Compliance With Contract Provisions." The purpose as stated in the House committee report was not to place "employees who are policing the program in the position of being dependent upon fees paid by those policed for their salaries," and authorized the financing of the balance of the program by transfer from the employer financed farm labor supply revolving fund.

The distribution of functions by activity in the 1959 budget submittal included 43 positions in addition to those in the activity "determining compliance with contract provisions" that were performing compliance duties.

The change in the 1960 budget submittal is to rectify this situation and have all compliance activities paid by direct appropriation.

There is a corresponding increase in "Compliance activities," Mexican farm labor program.

ADMINISTRATIVE ADJUSTMENTS

Additional personal services cost in 1959 due to within-grade salary increases.....	+5,100
Difference in personal services cost in 1959 made up by a reduction of 1 man year of employment.....	-5,100
Net change.....	-343,300

Farm labor supply revolving fund—Estimated balance June 30, 1959, and June 30, 1960

Balance June 30, 1958		\$852, 598
Income:		
Contracted:		
70,309 at \$10	\$703, 090	
257,793 at \$15	3, 866, 895	
111,898 at \$12	1, 342, 776	
Subtotal (440,000)	5, 912, 761	
Recontracted:		
4,032 at \$5.00	20, 160	
42,224 at \$7.50	316, 830	
13,744 at \$6.00	82, 464	
Subtotal (60,000)	419, 454	
		6, 332, 215
Total		7, 184, 813
Disbursements:		
Expenses	¹ \$4,012,800	
Equipment	150, 000	
Total	4, 162, 800	
Transfers Public Law 78 (salaries and expenses):		
Appropriation	1, 550, 000	
Supplement for pay increase	123, 500	
Total	1, 673, 500	
		5, 836, 300
Balance June 30, 1959		1, 348, 513
Income:		
Contracted 440,000 at \$12	\$5,280,000	
Recontracted 60,000 at \$6	360, 000	
		5, 640, 000
Disbursements:		
Expenses	¹ 4,012,800	
Equipment	50, 000	
		4, 062, 800
Transfers: Public Law 78 (salaries and expenses)		1, 336, 700
Balance June 30, 1960		1, 589, 013

¹ Based on budgeted costs. Includes transportation of workers, meals, photographs, rents, maintenance of reception centers and migratory stations, Public Health service, hospital and medical care, etc.

NOTE.—The above schedule reflects the increased number of workers estimated to be contracted fiscal year 1959 and revision in contracting and recontracting fees effective Jan. 15, 1959.

PREPARED STATEMENT

Mr. GOODWIN. For the Mexican farm labor program as a whole, we are asking for the same number of positions we have this year. For the compliance activities and the salaries and expenses of the Mexican farm labor program we are requesting a total of \$2,209,700 which is an increase of \$10,100 over the amount requested for these programs this year.

I have a statement on the compliance activities, as well as the 1960 appropriation request which I will submit for the record.

(The statements referred to follow:)

STATEMENT OF ROBERT C. GOODWIN, DIRECTOR, BUREAU OF EMPLOYMENT SECURITY,
ON THE 1960 APPROPRIATION REQUEST FOR COMPLIANCE ACTIVITIES FOR THE
MEXICAN FARM LABOR PROGRAM

Mr. Chairman, for compliance activities, Mexican farm labor program we are requesting \$873,000, an increase of \$353,400 over the amount required for 1959.

Of this increase, \$350,000 is to provide for the shift of 43 positions from the salaries and expenses part of the program, \$1,200 is for the postage rate increase and \$2,200 is for the extra day of pay in 1960.

In 1959, the Congress made a separate direct appropriation for this part of the program for which funds had been requested in the "Salaries and expenses" appropriation. The purpose of the direct appropriation as stated in the House committee report was not to place "employees who are policing the program in the position of being dependent, upon fees paid by those policed, for their salaries."

By making this transfer in the estimates, all compliance activities will be paid by direct appropriation and carry out fully the intent of the Congress.

There is a corresponding decrease in positions and funds requested for 1960 in the salaries and expenses, Mexican farm labor program request so that in the aggregate there is no increase in the number of positions in 1960.

My statement on the salaries and expenses, Mexican farm labor program, covers the activities of the whole program.

STATEMENT ON THE 1960 APPROPRIATION REQUEST FOR THE MEXICAN FARM LABOR PROGRAM

Mr. Chairman, for the Mexican farm labor program we are asking for the same number of positions as we had in 1959.

However, we are asking for an increase in the compliance activities part of the program and a corresponding decrease in the salaries and expenses part. The reason for this shift is because in 1959, the Congress made a separate direct appropriation for compliance activities so as not to place "employees who are policing the program in the position of being dependent, upon fees paid by those policed, for their salaries."

The compliance function is carried out by a group of field employees called foreign labor service representatives. These employees all do two general kinds of work. They investigate complaints of workers and they secure adherence to the terms of the individual work contract, the international agreement with Mexico and with Public Law 78. Those are compliance functions. The same individuals also do work which is classified as facilitating the supplying of workers. This work consists of such things as (1) visiting employers and workers at the place of employment to explain and interpret the terms of the international agreement with Mexico and the work contract; (2) inspecting housing and feeding facilities for workers; and (3) working with local community leaders and chambers of commerce to establish community acceptance of the program and to set up recreational, educational and church facilities for the workers.

Because only a part of their work could be classified as compliance work, the cost of the foreign labor service representatives was divided between two budget activities, one of which was the compliance activity. When the Congress made an appropriation from the general funds of the Treasury only for that part of the cost which had been requested in the compliance activity, it left the balance of the costs for these individuals to be paid by transfer from the farm labor supply revolving fund. To carry out fully the intent of the Congress we are therefore requesting that all employees performing compliance activities be transferred to that appropriation.

For the "Salaries and expenses" appropriation we are requesting \$1,336,700. This is a decrease of 43 positions and \$350,000 from the amount required for fiscal year 1959 because of the shift of these costs to the compliance activities appropriation, partially offset by the mandatory increases of \$2,700 for postage rate change and \$4,000 for extra day of work in 1960.

The appropriation language provides for reimbursement of the full amount for the salaries and expenses part of the program from the farm labor supply revolving fund. This fund is maintained by fees paid by employers for contracting Mexican workers. Under the law employers are required to reimburse the United States for expenses incurred in an amount not to exceed \$15 per worker. From August 1, 1948 to January 14, 1959 the fee for contracting a worker was \$15 and for recontracting a worker it was \$7.50. As you know the law does not contemplate the building up of this fund beyond what is needed for the expenses of bringing the Mexican workers to this country and returning them to Mexico. The balance in the fund on December 31, 1958, was adequate for this purpose but was continuing to grow. Therefore, effective January 15, 1959, the fee for contracting a worker was reduced to \$12 and the fee for recontracting a worker was cut to \$6.

This program is carried out under Public Law 78 as implemented by an agreement with Mexico. Foreign workers are required to supplement the supply of domestic workers during peak agricultural production periods. These workers are needed because the number of domestic agricultural workers has been decreasing over a period of years due to the trend of migration from rural to urban areas.

When the need for foreign workers is determined, requests for workers are transmitted to three migratory stations in Mexico. The workers are recruited by the Mexican Government and are instructed to report to the migratory stations where they are examined for physical condition, ability to perform farm work, and admissibility under the immigration laws. The workers selected are then transported to the appropriate reception center for the area in which they are to work. At the reception centers, which are in the United States, these workers are screened by the Public Health Service and the Immigration and Naturalization Service before being contracted to employers. During the past year the Public Health Service started giving serology tests to all Mexican workers at the reception centers before the beginning of their employment in the United States. From the time workers are accepted at the migratory stations to the time they are contracted to employers and after their return to the reception center by the employer after completion of the work contract, Mexican workers are provided transportation and medical care by the Department. However, the costs for these services are paid from the revolving fund.

We expect that the number of Mexican workers contracted in 1959 will about equal the number for 1958. With more normal production we expect that American employers will need 400,000 Mexican workers in fiscal year 1960. Foreign workers are brought in only when domestic workers are not available where and when needed. If domestic workers become available they are given jobs in preference to foreign workers.

The Department made a vigorous effort to reduce the use of Mexican labor in 1958 because of the rise in domestic unemployment. From January to May 1958, 25,000 fewer Mexicans were contracted than in the same 1957 period. However, by the end of the calendar year, because of the all-time record production in agriculture, the number of Mexicans contracted for agricultural work reached 432,857 for calendar year 1958 as compared to 436,049 in 1957. Mexican workers were employed in only 24 States in 1958 as compared to the 28 States where they were employed in the year before. Also through vigorous recruitment efforts we were able to make 9,282,300 placements of domestic workers in agriculture in 1958, which was an increase of 713,000 from 1957.

This past year has been an extremely active one. For example, some intensive work was carried on in the field of wages during the calendar year. The Bureau made 43 earning surveys in 18 crops in 17 areas involving 257 associations and 345 individuals. A new and more accurate formula for determining prevailing wages was introduced during the year. Field surveys, in which this formula was used, indicated that foreign workers employed at piece rates were earning less per hour than the hourly rate of pay for domestic agricultural workers in the area. Therefore, the Department has adopted wage policies which assure the Mexican workers the opportunity to earn at piece rates, at least as much as the rate he would receive by the hour. This policy is designed to avoid adverse effect on domestic wage rates. A great deal of work has been carried on with committees of employers to promote self-policing with respect to wage policies.

A good start has been made in the gathering of accurate information on the earnings of agricultural workers but it is a vast area about which no segment of Government is well informed. We expect to continue our efforts in this field so that we may have the facts on which to base decisions and programs. We are working with employers to get improvements in the quality of food served Mexican workers during their employment in the United States. We have prepared instructions for food preparation and have issued standard menus to employers and feeders of Mexican workers. In addition, our field staff has been inspecting feeding establishments to see that food is handled properly, is wholesome, and is served under sanitary conditions. Continued emphasis will be placed on this aspect of the program in 1960 in an attempt to make all establishments meet the minimum standards prescribed.

We have had some success with our efforts to get employer associations to do self-policing with reference to proper feeding, housing, and the payment of prevailing wage rates. We will continue these efforts during the coming year.

PROGRAM ADMINISTRATION

Mr. GOODWIN. The increase represents \$3,900 for higher postage and \$6,200 for the extra workday in 1960.

Senator HILL. The only increase you have had is for this extra day and for the extra postage?

Mr. GOODWIN. That is right, except that we are requesting an important transfer of \$350,000. We are proposing to transfer \$350,000, the cost of 43 field positions now carried in the "Salaries and expenses" appropriation for the Mexican farm labor program, to the compliance activities appropriation in 1960.

Until this year, 1959, the entire cost of administering the Mexican farm labor program had been financed by direct appropriation from the general funds of the Treasury. In 1959, however, the Congress approved a separate direct appropriation to finance the compliance activities of the program and directed that all other costs of salaries and expenses be derived by a transfer from the farm labor supply revolving fund.

The source of that fund is charges levied on individual employers for contracting Mexican workers.

HOUSE REPORT

The House Appropriations Committee in reporting out the direct appropriation for compliance activities stated that it was done so as not to place—

employees who are policing the program in the position of being dependent upon fees paid by those policed for their salaries.

They felt that the salaries of the persons who are really policing this program should not be dependent on those who are being policed. Psychologically it is not good. It is to carry out this expressed intent of the Congress that the transfer of charges for the 43 field positions from one appropriation to the other is recommended to this committee.

The compliance function is carried on by the farm labor service representatives. These employees all do two general kinds of work. They investigate complaints and secure adherence to the terms of the individual worker contract, the international agreement with Mexico, and with Public Law 78. Those are compliance functions.

The same individuals also do work to facilitate the supplying of workers needed. Since only part of their work could be classified as compliance work the cost was formerly divided between two activities of a single budgeted program, one of which was the compliance activity. We are now proposing that all employees doing compliance work be charged to the "Compliance activity" appropriation.

BASIS OF BUDGET

The budget request was based on contracting about 400,000 Mexican nationals during 1960. It now looks as though more than 440,000 will be contracted during 1959.

We estimate that with normal growing conditions about the same number of Mexican nationals will be needed in 1960 as in 1959, in other words, about 440,000.

According to our reports there will be an increase in cotton acreage and no significant decreases in any other part of the farm economy.

With this high workload, it will be difficult for us to get through on this amount, but we will do our very best to do so.

Senator HILL. I may say that Secretary Mitchell in his statement this morning went into this matter in some depth, as you have, Mr. Goodwin. Senator Byrd, do you have any questions on this item?

Senator BYRD. I believe not at this time.

Senator HILL. Thank you very much. And we appreciate this, sir.

Senator BYRD. Mr. Chairman, did we include all Mr. Goodwin's statements?

Senator HILL. They will all appear in full in the record.

Mr. GOODWIN. As a matter of fact, we have introduced for the record, if the committee approves, statements that are more complete than the summaries I gave you.

Senator HILL. We have your statements in full in the record.

INTRODUCTION OF NEW STAFF MEMBERS

Mr. GOODWIN. Mr. Chairman, may I introduce two new members of my staff, since we last appeared before you.

One is Mr. Curtis, our Deputy Director, who took Mr. Keenan's place.

And Mr. Norwood, who is Assistant Director in charge of the Employment Service.

Senator HILL. Good. We are happy to have you here, gentlemen.

Mr. GOODWIN. He was formerly State director from Florida, Mr. Chairman.

Senator HILL. It is nice to have you.

Thank you, gentlemen, very, very much.

Mr. GOODWIN. Thank you, Mr. Chairman.

Senator HILL. The committee will stand in recess now until 2 o'clock this afternoon.

(Thereupon, at 11:55 a. m., the subcommittee was recessed, to reconvene at 2 p. m., same day.)

AFTERNOON SESSION (2 P. M., MONDAY, APRIL 27, 1959)

The subcommittee reconvened at 2 p.m., upon the expiration of the recess.

Senator HILL. The committee will kindly come to order.

We have with us the Bureau of Employees Compensation, Mr. McCauley.

We shall be delighted to have you proceed, sir.

BUREAU OF EMPLOYEES COMPENSATION

STATEMENT OF WILLIAM McCAULEY, DIRECTOR, ACCOMPANIED
BY LEROY T. MINOR, ADMINISTRATIVE OFFICER; AND THEO-
DORE SCHWARTZ, CHAIRMAN, EMPLOYEES COMPENSATION
APPEALS BOARD

APPROPRIATION ESTIMATE

“SALARIES AND EXPENSES

“For necessary administrative expenses and not to exceed **[\$99,000]** *\$102,000* for the Employees’ Compensation Appeals Board, **[\$2,810,600]** *\$3,080,000*, together with not to exceed **[\$47,400]** *\$51,700* to be derived from the fund created by section 44 of the Longshoremen’s and Harbor Workers’ Compensation Act, as amended (33 U.S.C. 906).”

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$2, 810, 600	\$3, 080, 000
Proposed for later transmission:		
For pay act costs authorized by Public Law 85-462.....	243, 867	-----
For pay act costs authorized by Public Law 85-422.....	13, 133	-----
Total direct appropriation or estimate.....	3, 067, 600	3, 080, 000
Authorized transfers or reimbursement:		
From longshore trust fund, Public Law 85-580.....	47, 400	51, 700
For pay act costs authorized by Public Law 85-462.....	4, 100	-----
Total fund availability or estimate.....	3, 119, 100	3, 131, 700

Obligations by activity

Description	1959		1960		Change	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Disposition of compensation claims:						
(a) Federal employees.....	305	\$1, 969, 743	305	\$1, 981, 325	-----	+\$11, 582
(b) Longshoremen and harbor workers.....	108	780, 287	108	784, 791	-----	+4, 504
(c) Executive direction and manage ment services.....	25	160, 079	25	161, 059	-----	+980
(d) Administration of War Claims Act.....	10	50, 491	10	50, 825	-----	+334
2. Appeals from determinations of Federal em- ployee claims.....	11	107, 000	10	102, 000	—1	—5, 000
Total direct obligations.....	459	3, 067, 600	458	3, 080, 000	—1	+12, 400
3. Administration of longshoremen’s rehabili- tation program.....	7	51, 500	7	51, 700	-----	+200
Total direct and authorized obligations..	466	3, 119, 100	465	3, 131, 700	—1	+12, 600

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	466	465	-1
Average number of all employees.....	454	454	None
01 Personal services.....	\$2, 594, 773	\$2, 603, 915	+\$9, 142
02 Travel.....	106, 000	106, 000	None
03 Transportation of things.....	6, 000	6, 000	None
04 Communication services.....	70, 745	78, 145	+7, 400
05 Rents and utility services.....	17, 700	17, 700	None
06 Printing and reproduction.....	51, 300	46, 800	-4, 500
07 Other contractual services.....	62, 501	62, 501	None
08 Supplies and materials.....	30 850	30, 850	None
09 Equipment.....	19, 000	19, 000	None
11 Grants, subsidies, and contributions.....	158, 501	159, 059	+558
15 Taxes and assessments.....	1, 730	1, 730	None
Total obligations.....	3, 119, 100	3, 131, 700	+12, 600
Deduct: From transfers authorized from longshore trust fund by Public Law 84-855.....	51, 500	51, 700	+200
Total direct obligations.....	3, 067, 600	3, 080, 000	+12, 400

Summary of changes

	Direct appropri- ation	Authoriza- tions by transfer	Total estimated available
Enacted appropriation or transfer.....	\$2, 810, 600	\$47, 400	\$2, 858, 000
Proposed for later transmission:			
For pay act costs under Public Law 85-462.....	243, 867	4, 100	247, 967
For pay act costs under Public Law 85-422.....	13, 133	0	13, 133
Total estimated funds available in 1959.....	3, 067, 600	51, 500	3, 119, 100
Estimate for 1960.....	3, 080, 000	51, 700	3, 131, 700
Total change.....	+12, 400	+200	+12, 600

Mandatory items:

Increase in postal rates—Public Law 85-426 (direct appropriation \$7,355, trust fund authorization \$45).....	\$7, 400
Extra day of pay (261 days in 1959 and 262 days in 1960) :	
Personal services (direct appropriation \$9,487, trust fund authorization \$155).....	9, 642
Contributions to retirement fund (direct appropriation).....	558
Program decrease item: Elimination of 1 position in Employees' Compensation Appeals Board resulting from revised procedures initiated several years ago.....	-5, 000
Administrative adjustments :	
Reduction of 10 positions (10 man-years of full-time personal services).....	-43, 256
To provide for changes in average salary rates from the 1959 estimate due to within-grade and grade-to-grade promotions not included in the 1959 estimate.....	+31, 356
Reallocated to nonlabor to more properly reflect the objects of expenditures from which services derived from the working capital fund are financed.....	+11, 900
Net change.....	+12, 600

APPROPRIATION ESTIMATE

"EMPLOYEES' COMPENSATION [FUND] CLAIMS AND EXPENSES"

"(Indefinite)

"For the payment of compensation and other benefits and expenses (except administrative expenses) authorized by law and accruing during the current or any prior fiscal year, including payments to other Federal agencies for medical and hospital services pursuant to agreement approved by the Bureau of Employees' Compensation; continuation of payment of benefits as provided for under the head "Civilian War Benefits" in the Federal Security Agency Appropriation Act, 1947; the advancement of costs for enforcement of recoveries in third-party cases; the furnishing of medical and hospital services and supplies, treatment, and funeral and burial expenses, including transportation and other expenses incidental to such services, treatment, and burial, for such enrollees of the Civilian Conservation Corps as were certified by the Director of such Corps as receiving hospital services and treatment at Government expense on June 30, 1943, and who are not otherwise entitled thereto as civilian employees of the United States, and the limitations and authority of the Act of September 7, 1916, as amended (5 U.S.C. 796), shall apply in providing such services, treatment, and expenses in such cases and for payments pursuant to sections 4(c) and 5(f) of the War Claims Act of 1948 (50 U.S.C., app. 2012); such amount as may be required during the current fiscal year."

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$71,900,000	\$62,000,000
Total fund availability or estimate.....	71,900,000	62,000,000

Obligations by activity

Description	1959	1960	Change
1. Benefits for Federal civilian employees.....	\$41,985,000	\$43,185,000	+\$1,200,000
2. Benefits for reservists of the Armed Forces.....	27,900,000	17,000,000	-10,900,000
3. Benefits for members of Civil Air Patrol.....	68,000	78,000	+10,000
4. Benefits for members of Reserve Officers' Training Corps..	2,000	4,000	+2,000
5. Benefits for employees on Federal relief work projects.....	600,000	590,000	-10,000
6. War connected benefits for employees of Government contractors.....	125,000	125,000	None
7. Civilian war benefits.....	20,000	18,000	-2,000
8. Benefits under War Claims Act.....	1,200,000	1,000,000	-200,000
Total direct obligations.....	71,900,000	62,000,000	-9,900,000

Obligations by objects

	1959	1960	Change
12 Pensions, annuities, and insurance claims (total direct obligations).....	\$71,900,000	\$62,000,000	-\$9,900,000

Summary of changes

Enacted appropriation-----	\$71, 900, 000
Total estimated funds available in 1959-----	71, 900, 000
Estimate for 1960-----	62, 000, 000
Total change-----	-9, 900, 000

Mandatory items:

1. Expansion of payment costs on Federal employee claims due to cumulative additions to the rolls, the increase in Federal employees' salary in 1958 and increased medical costs-----	+1, 200, 000
2. Expansion in claims received from volunteer members of the Civil Air Patrol-----	+10, 000
3. Expansion in anticipation of receipt of more claims under the Reserve Officers' Training Corps-----	+2, 000
4. Reduction of a nonrecurring amount of \$10,400,000 for additional 6-month payment to widows of reservists and \$500,000 reduction as a result of Public Law 884 repealing legislation for coverage of reservists after Dec. 31, 1956--	-10, 900, 000
5. Reduction in claims costs for relief work employees which is diminishing gradually each year-----	-10, 000
6. Reduction of civilian war benefits, payments are made for injuries occurring prior to Apr. 30, 1945-----	-2, 000
7. Reduction of war claims benefits, this program is of a liquidating nature-----	-200, 000
Net change-----	-9, 900, 000

PERSONNEL SITUATION

Mr. McCATLEY. Mr. Chairman, the estimates submitted by the Bureau for salaries and expenses for fiscal year 1960 provide for the same staff of 455 employees and for the same organization as we have at the present time.

Senator HILL. In other words, no increase in the number of employees?

Mr. McCATLEY. No, sir: there is no change in the estimated appropriation except to meet increased costs due to statutory provisions such as an increase in postage rates and the 1 extra day of pay in 1960.

We have submitted a rather detailed statement, Mr. Chairman.

PREPARED STATEMENT

Senator HILL. We will have that statement appear in the record in full.

Mr. McCATLEY. That covers pretty well our problems for the year.

Senator HILL. Good.

(The statement referred to follows:)

STATEMENT OF WILLIAM McCATLEY, DIRECTOR, BUREAU OF EMPLOYEES' COMPENSATION

The 1960 budget proposes an appropriation of \$3,080,000 for the administrative expenses of the Bureau of Employees' Compensation. This sum includes \$102,000 for the Employees' Compensation Appeals Board, thus leaving \$2,978,000 for the operation of programs under the jurisdiction of the Bureau. In addition to this direct appropriation the estimate proposes to authorize the Bureau to use not to exceed \$51,700 from the special fund created by section 44 of the Longshoremen's and Harbor Workers' Compensation Act for rehabilitation services to beneficiaries of that act.

CHANGES IN APPROPRIATION

The estimate for 1960 includes an increase of \$17,400 in the administrative funds for the Bureau after adjustment in the 1959 appropriation, made necessary by changes in salary costs authorized by Public Laws 85-422 and 85-462. This small increase covers the cost of increased postal rates and 1 extra day of pay in 1960.

BUREAU PROGRAMS

The Bureau is engaged exclusively in administering Federal legislation authorizing workmen's compensation protection or similar benefits for some 3 million employees in public and private employment. Under the program for public employment which is based on the Federal Employees' Compensation Act, benefits are provided directly by the United States. Basic legislation for the program for private employment is the Longshoremen's and Harbor Workers' Act under which the employer provides compensation benefits under the supervision of the Bureau.

The only changes occurring during 1958 were an expansion of coverage under the Longshoremen's and Harbor Workers' Compensation Act to include additional employments. This act was made applicable to (1) civilian employees of nonappropriated fund instrumentalities of the Department of Defense (post exchanges, motion picture service, etc.) by the act of July 18, 1958, (2) employees of certain contractors on projects outside the United States financed and approved under the Mutual Security Act of 1954, by the act of June 30, 1958, and (3) persons employed outside the United States in providing welfare or similar services for the Armed Forces (Red Cross, U.S.O. etc.) by the act of August 8, 1958.

Coverage for employments at defense bases and on public works outside the United States under the act of August 16, 1941, was revised to include coverage for noncitizen employees and permanent coverage was authorized for detention, disability and death resulting from war hazards in covered employments outside the United States, by the act of August 8, 1958.

These programs will be discussed separately.

FEDERAL EMPLOYEES' COMPENSATION ACT PROGRAM

This program covers all civilian employees in the service of the United States and certain other groups to which it has been extended from time to time. The latter includes employees of the government of the District of Columbia (except police and firemen), members of the Civilian Air Patrol and members of the Reserve Officers Training Corps while in training at camps or on cruises. Prior to January 1, 1957, it was applicable in time of peace to members of the Reserve of the Armed Forces while on active or training duty. It was also applicable under certain limitations to a number of discontinued programs operated as emergency measures by the Federal Government. Many cases arising out of the latter employments remain on the compensation rolls and must be serviced.

The appropriation estimate for this program during 1960 is based on coverage for 2,340,000 employees and the receipt of 98,000 new injury reports from such employment. This is the same injury caseload estimated for the current year. It also covers the cost of continued servicing of claims and payment of benefits in 19,500 cases estimated to be carried over from prior years and in which additional benefits will be payable.

Approximately two-thirds of the operating expense of the Bureau is expended for this program. The estimate for 1960 provides for an increase of only \$11,582 for this program to cover the increased cost of postage and an extra day of pay in that year.

No changes are contemplated for 1960 in the procedure for administering this law other than continued efforts to improve administrative practices within the Bureau. These operations which are now two-thirds decentralized show continued overall improvement in the time required for the adjudication of claims. The record for the 6-month period ended June 30, 1958, shows that in 80 percent of all new disability claims adjudicated by the Bureau during that period, the initial installment of compensation was paid within 3 weeks from the receipt of the claim.

Particular attention has been given to the development of suitable procedures and control for the operations decentralized to four district offices of the Bureau in the field. Detailed procedure manuals have been prepared for the guidance of the field staff and audit controls have been developed for the inspection and

review of adjudications made in the local offices. It is important that appropriate controls be established to insure uniformity of practices in the several offices and full compliance with statutory requirements and Bureau policy in the adjudication of claims.

Further progress has been made in the program for rehabilitation of permanently disabled compensation beneficiaries. During the calendar year 1958, the Bureau staff in cooperation with State rehabilitation offices arranged vocational training programs for 130 compensation beneficiaries. Training was completed in 69 cases and in 48 such cases the employee was placed in gainful employment.

The major cost of this program is for benefits payable to or on account of disabled employees and dependents of those killed while in the performance of duty. Such benefits are payable from the employees' compensation fund which is shown under a separate heading.

LONGSHOREMEN'S AND HARBOR WORKERS' ACT PROGRAM

As previously indicated liability for the payment of compensation benefits under this program rests upon the employer who must insure his liability with an authorized insurance carrier or qualify as a self-insurer. Under this program, workmen's compensation protection is provided for (1) longshoremen and ship-repairmen while in maritime employment on the navigable waters of the United States, (2) employees in private enterprise in the District of Columbia, (3) employees of Government contractors outside the continental United States, (4) employees engaged in work on the Outer Continental Shelf, (5) civilian employees of post exchanges and other nonappropriated fund activities of the Department of Defense, (6) employees of the Red Cross, U.S.O. and other organizations while employed outside the United States in providing welfare and similar services for the Armed Forces, and (7) employees of certain contractors outside the United States under contracts financed and approved under the Mutual Security Act.

The employments noted under 5, 6, and 7 were brought under this program by legislation enacted at the past session of the Congress. Reliable information is not available at this time concerning the probable number of employees covered under this new legislation. Incomplete reports indicate that approximately 40,000 employees are employed by nonappropriated fund activities and that 2,500 compensation cases may be expected from such employments.

The only expense to the Federal Government for this program is the cost of administering the law. This cost amounting to \$784,791 represents 26 percent of the administrative appropriation for the Bureau. No increase is proposed for this program in 1960 except for the added cost resulting from the increase in postal rates and for 1 additional day of pay. This amounts to \$4,504.

The added work resulting from new legislation will be handled through the 13 district offices in the field established originally for administration of the law for maritime employments. Since these offices are located in port cities some adjustment in operating practices may be required to service cases arising out of the nonappropriated fund activities which are scattered over a wide geographic area. If this employment should cause a substantial increase in the number of formal hearings in controverted cases, it may become necessary to request an increase in funds for additions to the present staff to handle the work.

The cost of administering this law for employments in the District of Columbia is paid by funds received by transfer from the Government of the District of Columbia for this purpose.

EXECUTIVE DIRECTION AND MANAGEMENT SERVICES

The sum of \$161,059 is proposed for this purpose. This represents the cost of overall direction of the Bureau programs and general administrative management services. The amount requested is substantially the same as for the current year and represents about 5 percent of the administrative appropriation.

LONGSHOREMEN'S REHABILITATION PROGRAM

The estimates of appropriations for the Bureau includes an authorization to use \$51,700 from the trust fund created by section 44 of the Longshoremen's Compensation Act for rehabilitation services to permanently disabled benefi-

ciaries of that act. This trust fund is made up of sums paid by employers in certain fatal cases and from fines, penalties, and interest on invested surplus.

The amount proposed for 1960 is approximately the same as that authorized for the current year and provides for a staff of seven employees engaged in this rehabilitation service for seriously disabled employees. This rehabilitation service is carried out through facilities of the States and does not include any training program operated by the Bureau.

WAR CLAIMS ACT PROGRAM

Funds to cover all future costs for administration of benefits authorized by section 4(c) and 5(f) of the War Claims Act of 1948 and for the payment of such benefits were transferred from the war claims fund to the general fund of the Treasury. The sum of \$50,825 for administration of this function in 1960 is approximately the same as the amount provided for 1959.

EMPLOYEES' COMPENSATION FUND

This fund established by section 35 of the Federal Employees' Compensation Act covers the cost of all benefits provided by that act and for those payable under section 5(f) of the War Claims Act of 1948.

It is estimated that \$62 million will be required for the payment of such benefits in 1960. This represents a reduction of \$9,900,000 below estimated expenditures in the current year. Expenditures for 1959 include a nonrecurring cost of \$10,400,000 for the payment of additional compensation in 5,577 death cases in which compensation was awarded to dependents of deceased military reservists. The additional payments resulted from a decision of the Employees' Compensation Appeals Board which required payment of compensation during the 6-month period for which dependents received gratuity pay from the armed services. It had been the practice of the Bureau over the years to commence the payment of compensation in such cases at the end of the 6-month period for which the death gratuity payment was made. The additional payment is estimated to average about \$1,866 per case.

It may be noted also that more than 27 percent of the amount estimated to be expended from this fund in 1960 is for benefits on account of the death of military reservists and an additional 3 percent for other miscellaneous groups. Coverage for military personnel under this program was terminated as of January 1, 1957. However, benefits for injury or death occurring prior to that date are not affected by this change in coverage and the beneficiaries in such cases will be eligible for continued benefits.

The estimate for this fund is based on the assumption of an average level of 2,340,000 covered employees in 1960 and a new caseload of 98,000 injuries. The cumulative increase in permanent and long continuing disability and death cases on the rolls, the higher level of benefits in new cases resulting from increased wage rates of covered employees, and increased medical costs is expected to add \$1,200,000 to the cost for 1960. On the other hand the cost of benefits in old cases which arose out of discontinued projects is expected to decrease \$212,000. The factors increasing costs in 1960 were also operative in 1959 and added to costs in that year.

More detailed information concerning these programs accompany the estimate and I will be glad to supplement this in such further detail as may be desired.

INCREASE IN SALARIES AND EXPENSES ITEMS

Senator HILL. I notice in your salary and expenses estimate there is an increase of \$12,400.

Mr. McCauley. That is to meet the increase in postage and 1 extra day of pay in the fiscal year.

Senator HILL. That is all, is it?

Mr. McCauley. That is all we have, sir.

Mr. Dodson. Did you say increase in postal rates, too?

Mr. McCauley. That is right.

Senator HILL. Mostly increase in postal rates and this increase in 1 day's pay.

That is all, is it?

Mr. McCauley. That is the only increase we have.

Senator Hill. Thank you very much, sir.

Mr. McCauley. Thank you, Senator.

BUREAU OF LABOR STATISTICS

STATEMENT OF EWAN CLAGUE, COMMISSIONER, ACCOMPANIED BY PHILIP ARNOW, ASSISTANT COMMISSIONER; PAUL R. KERSCHBAUM, OFFICE OF PROGRAM PLANNING; HENRY J. FITZGERALD, ASSISTANT COMMISSIONER; RICHARD F. JONES, OFFICE OF MANAGEMENT; JAMES E. DODSON, ADMINISTRATIVE ASSISTANT SECRETARY OF LABOR; AND V. S. HUDSON, DEPUTY ADMINISTRATIVE ASSISTANT SECRETARY OF LABOR

APPROPRIATION ESTIMATE

"SALARIES AND EXPENSES

"For expenses, *not otherwise provided for*, necessary for the work of the Bureau of Labor Statistics, including advances or reimbursement to State, Federal, and local agencies and their employees for services rendered, **[\$7,424,500] \$9,465,000.**"

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$7,424,500	\$9,465,000
Proposed for later transmission: For pay act costs authorized by Public Law 85-462.....	595,000	-----
Total direct appropriation or estimate.....	8,019,500	9,465,000

Obligations by activity

Description	1959		1960		Change	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Collection, analysis, and publication of labor and economic statistics:						
(a) Manpower and employment.....	273	\$2,631,306	323	\$3,989,346	+50	+\$1,358,040
(b) Prices and cost of living.....	216	1,566,040	243	1,795,419	+27	+229,379
(c) Wages and industrial relations.....	157	1,181,346	160	1,201,793	+3	+20,447
(d) Housing and public construction.....	49	415,103	-----	-----	-49	-415,103
(e) Measurement of productivity.....	39	291,162	62	462,608	+23	+171,446
(f) Industrial hazards.....	37	248,714	44	289,784	+7	+41,070
(g) Foreign labor conditions.....	12	109,117	12	109,627	-----	+510
2. Central administrative services.....	95	929,347	95	931,541	-----	+2,194
3. Executive direction and program coordination.....	80	647,365	85	684,882	+5	+37,517
Total direct, obligations.....	958	8,019,500	1,024	9,465,000	+66	+1,445,500

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	958	1,024	+66
Average number of all employees.....	981	1,040	+59
01 Personal services.....	\$5,890,721	\$6,176,430	+\$285,709
02 Travel.....	277,900	326,963	+49,063
03 Transportation of things.....	9,000	8,561	-439
04 Communication services.....	244,200	285,745	+41,545
05 Rents and utilities.....	149,700	182,903	+33,203
06 Printing and reproduction.....	315,600	308,868	-6,732
07 Other contractual services.....	675,500	1,692,301	+1,016,801
08 Supplies and materials.....	73,300	79,658	+6,358
09 Equipment.....	25,000	25,000	None
11 Grants, subsidies, and contributions.....	351,629	371,826	+20,197
13 Refunds, awards, and indemnities.....	2,000	2,000	None
15 Taxes and assessments.....	4,950	4,745	-205
Total direct obligations.....	8,019,500	9,465,000	+1,445,500

Summary of changes

Enacted appropriation.....	\$7,424,500
Proposed for later transmission: For pay act costs authorized by Public Law 85-462.....	595,000
Total estimated funds available in 1959.....	8,019,500
Nonrecurring: Printing of "Occupational Outlook Handbook".....	-20,000
Estimate for 1960.....	9,465,000
Total change.....	1,465,500

A. Mandatory items:

1. Increase in postal rates (Public Law 85-426).....	45,000
2. Extra day of pay (261 days in 1959 and 262 days in 1960): Personal services.....	20,700
Contribution to retirement fund.....	1,300
3. Increase in State employee salary rates from 1959 average \$4,279 to \$4,425 in 1960.....	24,000
4. Conversion of all national series on employment, hours of work, earnings, and labor turnover to the new standard industrial classification system (34 positions, \$154,819, nonlabor \$60,181).....	215,000
5. Initiation of a 2-year program for the conversion of all na- tional work-injury rate data to the new standard indus- trial classification system (7 positions, \$28,487, nonlabor \$9,013).....	37,500

B. Program increase items:

1. To include Alaska in the BLS statistical program: Cooperative employment statistics program (no posi- tions, nonlabor \$9,000).....	9,000
Wage and industrial relations program (3 positions, \$9,813 nonlabor \$2,187).....	12,000
2. To provide direction, guidance, and analysis, and to pub- lish monthly data on labor force employment and unem- ployment in the United States (14 positions, \$85,319, nonlabor \$14,681).....	100,000
Funds for transfer to Bureau of Census to provide for col- lection and tabulation of monthly data on labor force employment and unemployment in the United States (corresponding reduction in Bureau of the Census appro- priation).....	980,000
3. Increase the frequency of pricing and expand the list of items and number of price quotations to improve the Consumer Price Index (27 positions, \$145,231, nonlabor \$69,769).....	215,000
4. To conduct statistical studies of labor requirements in the construction industry (21 positions, \$116,305, nonlabor \$41,695).....	158,000

Summary of changes—Continued

C. Program decrease items: Elimination of the construction statistics activity (40 positions, \$274,965, nonlabor \$77,035)-----	-\$352, 000
D. Administrative adjustments:	
1. Reduction in man-years of full-time employment in 1959 to provide funds for other purposes, (2a) 18.8 man-years, (2b) 10.5 man-years, (2c) 2.9 man-years-----	-190, 010
2. Increases in obligations:	
(a) To provide for the change in average salary rates from the 1959 estimate, due to within-grade and grade-to-grade promotions not included in the 1959 estimate-----	+76, 243
(b) To more properly reflect the objects of expenditure from which services derived from the working capital fund are financed-----	+62, 633
(c) To provide for an increased allotment for intermittent employment-----	+17, 134
(d) To provide for additional tabulation equipment rentals-----	+34, 000
E. Net change-----	<u>1, 465, 500</u>

Summary of new positions requested

ACTIVITY 1. COLLECTION, ANALYSIS AND PUBLICATION OF LABOR AND ECONOMIC STATISTICS

(a) MANPOWER AND EMPLOYMENT

For conversion to the new standard industrial classification system:

Departmental:

1 GS-13 statistician-----	\$9, 901
1 GS-12 statistician-----	8, 341
3 GS-11 statistician-----	21, 090
3 GS-9 statistician-----	17, 970
3 GS-7 statistical assistant-----	14, 976
2 GS-5 statistical clerk-----	8, 112
4 GS-4 clerk or stenographer-----	15, 060
1 GS-3 clerk-----	3, 515

Total permanent, departmental-----	<u>98, 965</u>
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Field:

3 GS-7 field representative-----	14, 976
2 GS-5 statistical clerk-----	8, 112

Total permanent, field-----	<u>23, 088</u>
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Portion of machine tabulation allocated to activity 1(a)

Departmental:

1 GS-5 supervisor-----	4, 056
2 GS-4 machine operator-----	7, 530
8 GS-3 machine operator-----	28, 120

Total permanent-----	<u>39, 706</u>
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Summary of new positions requested—Continued

ACTIVITY 1. COLLECTION, ANALYSIS AND PUBLICATION OF LABOR AND ECONOMIC STATISTICS—Continued

(a) MANPOWER AND EMPLOYMENT—continued

For publication of the monthly report on the labor force:

Departmental:

1 GS-15 economist	\$12,771
1 GS-14 economist	11,357
1 GS-13 senior manpower and employment specialist	9,901
1 GS-12 senior manpower and employment specialist	8,341
1 GS-12 statistician	8,341
1 GS-7 statistical assistant	4,992
2 GS-5 clerk	8,112
6 GS-4 clerk or stenographer	22,590

Total permanent, departmental	86,405
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Total permanent, activity 1(a)	248,164
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(b) PRICES AND COST OF LIVING

Departmental:

2 GS-11 price index or commodity specialist	14,060
3 GS-9 price index or commodity specialist	17,970
3 GS-7 senior price or index commodity assistant	14,976
2 GS-5 clerk	8,112
7 GS-4 clerk or stenographer	26,355

Total permanent, departmental	81,473
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Field:

4 GS-9 field representative	23,960
4 GS-7 field representative	19,968

Total permanent, field	43,928
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Portion of machine tabulation allocated to activity 1(b)

Departmental:

2 GS-3 machine operator	7,030
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Total permanent	7,030
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Total, activity 1(b)	132,431
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(c) WAGES AND INDUSTRIAL RELATIONS

Departmental:

1 GS-9 wages and industrial relations specialist	5,990
1 GS-5 clerk	4,056

Total permanent, departmental	10,046
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Field:

1 GS-13 senior wages and industrial relations specialist	9,901
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Total permanent, field	9,901
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Total, activity 1(c)	19,947
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(E) MEASUREMENT OF PRODUCTIVITY

Departmental:

1 GS-12 statistician	8,341
2 GS-11 statistician	14,060
2 GS-9 statistician	11,980
2 GS-7 statistician	9,984
3 GS-5 clerk	12,168
3 GS-4 clerk or stenographer	11,295

Total permanent, departmental	67,828
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Summary of new positions requested—Continued

ACTIVITY 1. COLLECTION, ANALYSIS AND PUBLICATION OF LABOR AND ECONOMIC STATISTICS—Continued

(E) MEASUREMENT OF PRODUCTIVITY—continued

Field: 7 GS-7 field representative-----	\$34, 944
Total permanent, field-----	34, 944
Portion of machine tabulation allocated to activity 1(e) :	
Departmental:	
1 GS-3 machine operator-----	3, 515
Total permanent-----	3, 515
Total, activity 1(e)-----	106, 287

(F) INDUSTRIAL HAZARDS

Departmental:	
1 GS-9 industrial hazards specialist-----	5, 990
1 GS-5 clerk-----	4, 056
4 GS-4 clerk or stenographer-----	15, 060
Total permanent, departmental-----	25, 106
Portion of machine tabulation allocated to activity 1(f) :	
Departmental:	
1 GS-3 machine operator-----	3, 515
Total permanent-----	3, 515
Total, activity 1(f)-----	28, 621

APPROPRIATION ESTIMATE

"Revision of the Consumer Price Index

"For expenses necessary to enable the Bureau of Labor Statistics to revise the Consumer Price Index, including temporary employees at rates to be fixed by the Secretary of Labor without regard to the civil service laws and Classification Act of 1949, as amended, services as authorized by section 15 of the Act of August 2, 1946 (5 U.S.C. 55a), \$230,000, to remain available until June 30, 1964."

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate-----		\$230, 000
Total estimate-----		230, 000

Obligations by activity

Description	1959		1960		Change	
	Posi-tions	Amount	Posi-tions	Amount	Posi-tions	Amount
Revision of the Consumer Price Index-----			35	\$230, 000	+35	+\$230, 000
Total direct obligations-----			35	230, 000	+35	+230, 000

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....		35	+35
Average number of all employees.....		39	+39
01 Personal services.....		\$196,970	+\$196,970
02 Travel.....		5,355	+5,355
04 Communication services.....		1,715	+1,715
06 Printing and reproduction.....		4,000	+4,000
07 Other contractual services.....		559	+559
08 Supplies and materials.....		2,573	+2,573
09 Equipment.....		10,000	+10,000
11 Grants, subsidies, and contributions.....		5,912	+5,912
15 Taxes and assessments.....		2,916	+2,916
Total direct obligations.....		230,000	+230,000

Summary of changes

Estimate for 1960.....	\$230,000
Total change.....	230,000
Program increase item: Revision of the Consumer Price Index (35 positions, \$196,970, nonlabor \$33,030).....	+230,000
Net change.....	+230,000

*Summary of new positions requested**Activity 1. Collection, analysis, and publication of labor and economic statistics*

(b) PRICES AND COST OF LIVING

For revision of the Consumer Price Index:

Departmental:

1 GS-15 economist.....	\$12,771
1 GS-14 statistician.....	11,357
1 GS-13 statistician.....	9,901
1 GS-12 senior price or commodity specialist.....	8,341
2 GS-11 price index or commodity specialist.....	14,060
4 GS-9 price index or commodity specialist.....	23,960
4 GS-7 senior price or commodity specialist.....	19,968
4 GS-5 statistical clerk.....	16,224
14 GS-4 clerk or stenographer.....	52,710

Total permanent, departmental..... 169,292

Field: 3 GS-7 field representative..... 14,976

Total permanent, field..... 14,976

Total permanent, activity 1(b)..... 184,268

PREPARED STATEMENT

Senator HILL. We will have the Bureau of Labor Statistics, Mr. Clague.

Do you have a prepared statement, Mr. Clague?

Mr. CLAGUE. Mr. Chairman, I do have a prepared statement which I shall be glad to submit for the record.

Senator HILL. We will have that appear in full in the record.

(The statement referred to follows:)

STATEMENT OF EWAN CLAGUE, COMMISSIONER OF LABOR STATISTICS

The budget estimate for the regular program of the Bureau of Labor Statistics for fiscal 1960 is \$9,465,000. In addition, a separate statement is being submitted recommending the revision of the Consumer Price Index (CPI) upon the basis of new studies of consumer expenditures.

I should like to state at the outset that approximately three-quarters of the increase, or \$1,080,000, reflects the result of administrative arrangements to transfer responsibility for the Monthly Report on the Labor Force, which produces the Government's basic labor force, employment and unemployment data, from the Bureau of the Census of the Department of Commerce, to the BLS. Thus, this is not a true increase; the Bureau of the Census estimates reflect a reduction of like amount.

The following increases are mandatory items because they cover costs over which the BLS has no control:

Increase in postal rates.....	\$45, 000
Extra day of pay in 1960.....	22, 000
Increases in State employee salary rates under the cooperative Federal-State employment statistics program.....	24, 000
Conversion of all national series on employment, hours of work, earnings, and labor turnover to the new standard industrial classification (SIC) to conform to general Government practice.....	215, 000
Initiation of the 2-year program for conversion of national work injury rates data to the new standard industrial classification.....	37, 500

Beyond this, the requested increase is to conduct statistical studies of labor requirements (\$158,000); to improve the pricing underlying the Consumer Price Index (CPI) (\$215,000); and for adding Alaska to the employment and industrial relations programs.

MONTHLY REPORT ON THE LABOR FORCE

The apparent increases related to the monthly report on the labor force grow out of an agreement between the Secretary of Labor and the Secretary of Commerce placing responsibility for this program in the BLS. Under this new arrangement, if approved by appropriation action, the Department of Labor will be responsible for the overall labor force, employment and unemployment data for the economy as a whole. In addition, of course, the Department will also continue its established responsibility for current data on employment by industry and locality, and insured unemployment. At the present time, some of the Government's data are the responsibility of the Department of Labor and some the responsibility of the Department of Commerce. The new system should improve the effectiveness of the Government's statistics on employment and unemployment and produce improvements in our analyses and understanding of these subjects.

Under the new arrangement, the BLS will have the full responsibility for program direction, planning, analysis, and publication of the monthly data on labor force, employment and unemployment, but will contract with the Census Bureau for the collection and tabulation of the material upon which the reports are based. The total of \$1,080,000 in the request includes \$980,000 to be transferred to the Census Bureau for its role in the program as an agent of the BLS.

CONSTRUCTION STATISTICS PROGRAM

The Secretaries of Commerce and Labor have also agreed on steps which would consolidate in one agency the Government's construction statistics programs formerly carried on in these agencies. Here too, at the present time, the responsibilities are divided between the two departments. The agreement, to be effective in fiscal 1960, if approved by appropriation action, would consolidate the responsibility for construction statistics in the Department of Commerce. This will involve the transfer of a major part of the Bureau's present construction activity to the Department of Commerce and a decrease of \$352,000 in the Bureau's basic appropriation.

LABOR REQUIREMENT

In connection with this agreement to concentrate the Government's construction statistics in the Department of Commerce, it has been agreed that the BLS shall continue to have responsibility for employment statistics for the construction industry and for statistics on construction and other labor requirements.

The last surveys of labor requirements were made over a decade ago, covered only the construction industry, and are virtually useless for present purposes. During recent years, the lack of these data have been particularly notable, especially in connection with efforts to estimate the employment effects of Government and private construction programs. The Bureau has been asked repeatedly for estimates of the employment effects of particular programs and has been able to supply little or no information. Last year, during the recession, the Bureau was unable to estimate the employment-creating effects of public works programs for the administration and was not able to give adequate information to the chairman of the Senate Appropriations Committee in response to his request for similar data to evaluate hospital building projects then under consideration.

To remedy this deficiency, the request includes an increase of \$158,000 to conduct statistical studies of labor requirements on a continuing basis.

INCREASES IN STATE SALARY RATES

The proposed increase in the funds for transfer to the States is in recognition of the necessity to make regular provision for State statutory salary increases affecting the joint Federal-State employment and manpower program. This will help to assure continued satisfactory performance by the participating States.

RECLASSIFICATION TO NEW STANDARD INDUSTRIAL CLASSIFICATION

Changes in the organization and structure of industry have required periodic changes in the classification structure which the Government uses to classify its data. The Government statistical agencies, at both Federal and State levels, are now in process of adopting a revised standard industrial classification system. The new system was prepared by the cooperative efforts of Federal statistical agencies, under the leadership of the Bureau of the Budget. The new code system will be used for the 1958 Census of Manufactures and has already been installed by the State unemployment compensation agencies. Comparability with these data is essential.

In the case of the Bureau of Labor Statistics, this conversion will affect two programs: the employment, hours, and earnings series, and the work-injury statistics. The cooperating States involved in employment and earnings statistics are now completing their part of the work. The Federal task, which involves code revision, very extensive retabulations, checking, and estimating, is still to be done.

Reclassified data on employment, hours, and earnings will be completed in fiscal 1960. In the case of the work-injury data, it will be more efficient to do this work over a 2-year period; the current request is for the first of these 2 years.

COVERAGE OF ALASKA

Statehood for Alaska makes it necessary to include it in statistical programs of the BLS in the same way that other States are represented. This involves both the question of adding data for Alaska to data for the other 48 States in arriving at totals for the United States, and the question of providing separate data for Alaska where separate State data are now provided for the other States. A general review of this problem has been made throughout the Government, and we are requesting funds to advance national data to include Alaska in two areas of the Bureau's program.

It is recommended that funds be appropriated—

- (a) To bring Alaska into the cooperative employment statistics program; and
- (b) To preserve the nationwide character of our strike statistics and our information on major labor-management contracts and collective bargaining settlements.

The proposed program of consumer expenditure surveys for revision of the CPI will provide a basis for a national index based upon consumer expenditures for the United States as a whole.

PRICING PROGRAM FOR THE CONSUMER PRICE INDEX

Our continuing review of the way in which we collect prices for the Consumer Price Index has led us to a number of conclusions, all of which point to the need for collecting more price quotations:

First, the list of 300 commodities and services now priced for the index has remained virtually unchanged for the past decade. In the meantime the number and variety of goods available in the consumer market has increased greatly. We can no longer rely on that small group of items to reflect price trends.

Second, the creation of new kinds of stores—discount houses and suburban stores—has resulted in a sizable expansion in the numbers of sources from which consumers buy. Since price trends in these outlets are not uniformly reflected by price trends of large department stores and shops in the central cities, it is important that the new outlets be included in the pricing program.

Third, there is greater month-to-month change in the prices of many commodities than was the case several years ago. At present the Bureau collects prices monthly in all the 46 Consumer Price Index cities only for food and fuels. Most other commodities are priced monthly only in 5 cities. These commodities are priced in the remaining cities only once a quarter. This is done on a rotating basis under which approximately 15 quarterly cities are included each month. There is a growing possibility that month-to-month changes in the cities surveyed may exaggerate the changes for the country as a whole. More of the CPI cities should be included in the regular monthly surveys.

The combined results of these findings all point to the need for more pricing. We have been able to make some improvements with the funds that the Congress has granted in recent years, but the size of the problem has become so great that much more must be done. The proposed increase in expenditures would permit approximately a one-fifth increase in the total number of price quotations collected. This addition is considered necessary in order to institute and maintain improvements needed immediately to assure the continued accuracy of the index.

It is our technical judgment that these changes in pricing should be made at the earliest opportunity. They will enable us to continue to produce an index which measures up to the standards of accuracy that are required for the uses to which it is put. I have referred to these uses in prior appearances before the committee. One effect of the index that has come to my attention in recent months is one which I am sure will interest the committee. Each increase in the index of one index point results in an increased Government expenditure of approximately \$22 million a year, as a result of wage increases on Government contract work which are reimbursed by the Government as a cost of production.

The expansion in the current index coverage is separate and distinct from the problem of revising the entire index as patterns of consumer expenditure change. A separate request provides for basic revision of the CPI and the expenditure surveys necessary for that revision.

MANDATORY ITEMS

Mr. CLAGUE. I think if you can give me 5 minutes I can summarize very briefly the general picture of my Bureau.

Senator HILL. I notice there is quite an increase, in fact, the Secretary addressed himself to this this morning.

We will be happy to have you summarize it any way you wish, sir.

Mr. CLAGUE. Thank you, Mr. Chairman.

I would like to summarize the four regular major items of the Bureau and the special appropriation as a separate one.

First, we have a series of mandatory items. We have the small item for postage, extra day's pay, and so on, and we have a larger one which is the standard industrial classification. That is the reclassification of many of the firms of the country into new industry groups.

This has been done by the Bureau of the Census, by the State agencies that cooperate with us. Our Bureau is scheduled to do this next year.

Senator HILL. In other words, what is being done is that this function or responsibility is being transferred really to the Bureau of Labor Statistics from the Department of Commerce; is that correct?

Mr. CLAGUE. Not quite, Mr. Chairman. I am still talking about this mandatory item.

Senator HILL. All right, go ahead.

Mr. CLAGUE. The standard industrial classification is something which has been done by the Census and by the State agencies. We have to do that. That is a 1-year operation for employment statistics, continuing in the second year for our accident statistics.

That is \$343,500.

Then the transfer of the monthly report of the labor force to the Census. That shows that there is a \$1,080,000 increase in our budget. But I would like to point out that that represents no net increase to the Government as a whole. An equivalent amount has been taken out of the budget of the Bureau of the Census.

This is simply a transfer of funds from them to us.

I might point out, secondly, that \$980,000 of that will be transferred back to them to buy their services for conducting this program.

Senator HILL. They are going to work for you?

Mr. CLAGUE. They are going to work for us. This means that program responsibility and financial responsibility are now in the Bureau of Labor Statistics. But I emphasize again this is no net increase to the Government.

Third, the construction statistics has been transferred out of our Bureau. That is a loss of \$352,000. That will be transferred to the Census, if approved by the Congress.

So we will have a net loss of \$352,000 in that work which we have been doing heretofore.

Now, fourth, I come down to continuing program increases, three of them totaling \$394,000. One of them is a small item for Alaska. We are applying to Alaska two small statistical projects that amount to \$21,000.

Senator HILL. What would those items be?

Mr. CLAGUE. The employment statistics program which we have now in the 48 States and the District of Columbia here, will be extended to Alaska. That is, funds would be given to the Alaska agency to cooperate with us.

The second item concerns wages and industrial relations; we expect to collect information on strikes or work stoppages in Alaska.

There may be in the future some other series that we may want to bring to Alaska in order to increase the continental statistics.

CONSUMER PRICE INDEX

Now, there are two major program items left. One is the pricing of the consumer price index; that is something which we want to begin next year. That means more pricing of what we now produce.

We want to increase the number of commodities and services that we price. We want to include more stores and we would like to price with greater frequency.

A good many items are now priced only once in 3 months. We would like to price them monthly, some of those that vary a great deal from month to month.

Because of the large amount of escalation based on this contract, we feel the need of more and more accuracy.

LABOR REQUIREMENTS

The other item is labor requirements, \$158,000. You may recall last year, Mr. Chairman, we were very reluctant to supply you statistics on the amount of labor required in hospital construction. Our data are about 20 years out of date.

We used to do this more regularly, but in recent years we have been doing very little, just a few thousand dollars worth each year.

We have been authorized to request this \$158,000 so that we may undertake a continuing program.

We will do hospitals, schools, and sewer and water works next year. Then we will step to industrial and commercial building and private housing in subsequent years, later to public utilities, and so on; we want to have a continual cycle of labor requirements data.

Senator HILL. How long do you think it will take you to make it current?

Mr. CLAGUE. In this first year we would bring it up for hospitals, schools, sewer and waterworks.

Senator HILL. That will be the program for 1960?

Mr. CLAGUE. Yes.

Then we have another program for 1961, a third program for 1962. Then we plan to do it on a 3-year cycle. Every third year we will bring it up to date.

Senator HILL. In other words, at the end of the third year you will go back to your hospitals, schools, and sewage facilities and then bring them up to date?

Mr. CLAGUE. That is right.

Technology changes so rapidly in these days that unless you keep reasonably up to date you cannot make the accurate comparisons that are needed.

May I say it is not only the total number of persons involved, but even more important is to get the crafts and the occupations, the breakdown by the different occupations which is needed also.

Those are the four major classifications in our regular budget.

SPECIAL CONSUMER PRICE INDEX REVISION

Then there is the special Consumer Price Index revision. That is the longer range plan to improve the Consumer Price Index, a 5-year program for which we are asking \$230,000 in this first year in order to do the planning and preparation that will be necessary to start the expenditure surveys in fiscal 1961 and 1962.

Senator HILL. What do you estimate the overall cost for the 5 years will be?

Mr. CLAGUE. Approximately \$4,600,000. I would like, Mr. Chairman, to come back to you next spring if we get this amount to start the planning this year, with a firmer estimate. We will know more definitely because we are consulting our advisory committees.

And we will review very carefully the question of how broad our surveys ought to be, how many people ought to be included, and what kind of things we should survey the families for. I think that summarizes our budget presentation, Mr. Chairman.

Senator HILL. Thank you very much, Mr. Clague. We appreciate your testimony very much.

Mr. CLAGUE. Thank you.

Senator HILL. Now, the Women's Bureau.

Now, you have a prepared statement. We will put that in the record, then you may summarize it any way you see fit.

WOMEN'S BUREAU

STATEMENT OF ALICE K. LEOPOLD, DIRECTOR, WOMEN'S BUREAU,
ACCOMPANIED BY FRANCES A. AMBURSEN, CHIEF, DIVISION OF
ADMINISTRATIVE MANAGEMENT; ALICE A. MORRISON, CHIEF,
DIVISION OF WOMEN'S LABOR LAW AND CIVIL AND POLITICAL
STATUS; AND STELLA P. MANOR, CHIEF, DIVISION OF PROGRAM
PLANNING ANALYSIS, AND REPORTS

APPROPRIATION ESTIMATE

"For expenses necessary for the work of the Women's Bureau, as authorized by the Act of June 5, 1920 (29 U.S.C. 11-16), including purchase of reports and material for informational exhibits, **[\$462,000] \$509,000.**"

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$462,000	\$509,000
Proposed for later transmission: For pay act costs authorized by Public Law 85-462.....	44,000	None
Total direct appropriation or estimate.....	506,000	509,000

Obligations by activity

Description	1959		1960		Change	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Development of programs and materials to improve women's employment opportunities and economic status.....	22	\$163,949	22	\$171,596	-----	+\$7,647
2. Advisory services on legislation affecting women workers.....	9	78,477	9	72,227	-----	-6,250
3. Executive direction and program coordination.....	16	171,189	16	172,201	-----	+1,012
4. Administrative services and management.....	14	92,385	14	92,976	-----	+591
Total direct obligations.....	61	506,000	61	509,000	-----	+3,000

Obligations by objects

	1959	1960	Change
Total number of permanent positions-----	61	61	None
Average number of all employees-----	60	60	None
01 Personal services-----	\$402,800	\$404,400	\$1,600
02 Travel-----	22,840	22,840	None
03 Transportation of things-----	500	500	None
04 Communication services-----	13,000	14,400	1,400
06 Printing and reproduction-----	25,200	25,200	None
07 Other contractual services-----	7,100	7,100	None
08 Supplies and materials-----	5,700	5,700	None
09 Equipment-----	2,300	2,300	None
11 Grants, subsidies, and contributions-----	25,940	25,940	None
15 Taxes and assessments-----	620	620	None
Total direct obligations-----	506,000	509,000	3,000

Summary of changes

Enacted appropriation-----	\$462,000
Proposed for later transmission—increased pay costs under Public Law 85-462-----	44,000+
Total estimated funds available in 1959-----	506,000
Estimate for 1960-----	509,000
Total change-----	3,000+
Mandatory items:	
Increase in postal rates (Public Law 85-426)-----	1,400
Extra day of pay (261 days in 1959 and 262 days in 1960)-----	1,600
Net change-----	3,000

PREPARED STATEMENT

Mrs. LEOPOLD. Thank you.

(Mrs. Leopold's prepared statement follows:)

STATEMENT OF MRS. ALICE K. LEOPOLD, ASSISTANT TO THE SECRETARY OF LABOR AND DIRECTOR, WOMEN'S BUREAU, DEPARTMENT OF LABOR, ON 1960 ESTIMATE FOR SALARIES AND EXPENSES, WOMEN'S BUREAU

Our estimate for 1960 is for \$509,000. No increase in program or staff is requested.

During 1958, the average number of women in the labor force was almost 22½ million—again exceeding all previous records and better than 3 million more than at the height of World War II. Last October, the number reached an alltime high of 23 million. We know, of course, from Census reports for earlier years that a much larger number of individual women worked at some time during the year, some for only short periods of time. As contrasted with the average for the year, probably as many as 29 million individual women worked at some time last year.

The average number of employed women in 1958, however, dropped almost 100,000 below 1957—numbering some 21 million. An average of more than 1½ million women were unemployed in 1958—about one-half million more than in 1957.

More than one-third of all adult women in the population were working. They filled one out of every three jobs, with by far the largest number in clerical work. More than 2 million women were working in secretarial, stenographic, and typing jobs; about 1¼ million were teaching; another half million were nurses. About a million were in high-level jobs as managers, officials, and proprietors.

Today, the average woman worker is 40 years of age. The 2 largest age groups are 35-44 with 5,167,000 women and 45 to 54 with 4,846,000. Most of these are women whose children are grown and going to school.

The majority of women continue to be homemakers, whether or not they also have jobs. Some 55 percent of them devote full time to homemaking. Better than 35 percent are workers and most of these are homemakers; the remaining 9 percent are primarily girls under 20 years of age who are in school. This means that practically all adult women in the population are making a contribution to the smooth running of the economy, either as jobholders, homemakers, or both.

This past year the Women's Bureau broadened the scope of its activities in two important areas. We cooperated with the Office of Vocational Rehabilitation in preparing a pamphlet entitled "Help for Handicapped Women," designed to increase public understanding of the rehabilitation services available to handicapped women and to stimulate women's interest in activities for the handicapped, including career opportunities. We have also been cooperating with the Department's Committee on Migratory Labor to encourage voluntary community groups in carrying on programs for improving the conditions under which women migrants live and work. Later this year we expect to publish a report on community projects for migrants, to provide facts and ideas to organizations interested in carrying on similar action programs in the migratory labor field.

In 1958, we published the biennial edition of our "Handbook on Women Workers," which will again appear in the 1960 program. This bulletin is widely used by labor and management, writers, educators, counselors, students, legislators—both State and Federal—and many others, as a source book of facts and figures about working women and the legislation which affects their working lives.

We are continuing our efforts wherever possible to stimulate community action which might help alleviate the shortage of nurses. The study of hospital nurses' wages and working conditions in 16 urban areas has been most helpful to the nurses' organizations in their efforts along these lines, and we are working with them continuously to increase public awareness of the problem.

Although there are relatively few women among scientists, mathematicians, and engineers, there is growing evidence of a changing attitude toward women in these fields and much greater acceptance of qualified women. Because of these facts and the need for well-qualified persons in these fields, we should continue to provide information to girls, their families, and their school counselors so that they may be prepared to take advantage of future career opportunities in the sciences and may consider these professions as possible long-term careers for the time when they wish to return to the labor force. We have already published reports on opportunities for women as engineers and mathematicians, and this year we plan to publish one or more reports on women scientists, including information from the National Scientific Register. In 1960 we plan to analyze the basic data from the Bureau of Labor Statistics' Occupational Outlook Handbook to discover new developments in the employment of women, and we shall study the part-time employment of women, their opportunities for employment in manufacturing electronics equipment, and the effects of automation on women's employment in selected plants. We shall continue our work on employment opportunities in selected occupations.

In addition, we expect to develop material on equal pay surveys made by women's and civic organizations, to provide material to support additional programs in eliminating wage discrimination based on sex. During the year, the Women's Bureau, in cooperation with the National Consumers League, held a conference of administrators of State minimum-wage laws for women. We are now bringing together comprehensive technical materials to assist States and voluntary groups concerned with the establishment of improved minimum-wage rates through the tripartite wage board system.

Jointly with the Department of Health, Education, and Welfare, we expect to complete a study of day-care programs and services of national organizations for children of working mothers, and to hold a series of conferences of such organizations to encourage additional community action in this field.

We shall continue to assist national organizations on international programs to advance the status of women, and to cooperate with such international organizations as the Status of Women Commission, the Inter-American Commission on Women, and the International Labor Organization. This past year, for example, we held a conference of representatives of 35 national organizations at which we explored ways in which programs and activities in the international field could be strengthened and stimulated. We also acted as co-sponsor of an International-Night program held by the National Council of Negro Women here in Washington.

Because of the increased interest and number of requests we have received from various parts of the country and the special interest of the Business and Professional Women, we have this year signed an agreement with the national office of the Business and Professional Women to conduct future forums through their State and local leaders. The program planning assistance and basic information needed for the forums will continue to be provided by the Women's Bureau. Eleven forums have now been held, and five others are in the planning stage.

Our four-member field staff has played a most important part in the action programs that I have mentioned. In 91 cities in 40 States they have met with representatives of several hundred local, State, and regional organizations to give assistance on projects of mutual interest and to obtain information on a wide range of subjects for our headquarters staff to use in their work.

They have reported on economic and general employment data; both shortages and employment opportunities, including training programs; community action programs; legislation for women; interest in international projects; and public relations, including conferences, meetings, and the use of publications. These assignments and the total range of activities of our field staff have strengthened our relationships with State labor departments as well as national organizations in many areas.

I shall be glad to answer any questions, Mr. Chairman.

INCREASED ACTIVITIES

Mrs. LEOPOLD. Since you have the filed statement, Mr. Chairman, I might say there are no increases in personnel and no changes in the budget other than the \$3,000 which, as has been described by other bureaus, is for 1 day's pay and increase in postage.

If I might be permitted to say just one thing about the increased activities of the Women's Bureau, I would say that the money appropriated by the Congress in 1957 for the 1958 staff, for a small but extremely effective field staff, is widening our contacts and bringing in useful information and carrying our services more widely to those who need them.

I consider that the success of our work in the past year and a half has been augmented by the new field staff. That is all, sir.

Senator HILL. The employment of women on the whole, on an average, is steadily increasing, is that not true?

Of course, you have these dips when you have unemployment and that kind of thing, but in proportion to the number of men, over the last 6 or 7 years there has been a pretty steady increase; has there not?

Mrs. LEOPOLD. That is true, sir.

Senator HILL. You feel that your work has been most helpful to this end?

Mrs. LEOPOLD. Oh, I do, because I think there are many people who look to the Women's Bureau to determine the kinds of opportunities that lie ahead for them and that are appropriate.

Senator HILL. Is there anything else you would like to add for the record?

Mrs. LEOPOLD. I don't believe so, thank you.

Senator HILL. All you have is the increase for the additional day and for the increased cost in postage; is that right?

Mrs. LEOPOLD. That is right, Mr. Chairman.

Senator HILL. All right. Thank you very much, Mrs. Leopold. It is nice to see you again. It is nice to have all of you here.

Senator HILL. Now, the Wage and Hour Division.

WAGE AND HOUR DIVISION

STATEMENT OF CLARENCE T. LUNQUIST, ADMINISTRATOR; ACCOMPANIED BY SAMUEL GANZ, ASSISTANT ADMINISTRATOR; CHARLES D. HALE, DIRECTOR, OFFICE OF ADMINISTRATIVE MANAGEMENT; AND IRVING LEVINE, CHIEF, DIVISION OF MANAGEMENT OPERATIONS AND SERVICES

APPROPRIATION ESTIMATE

"For expenses necessary for performing the duties imposed by the Fair Labor Standards Act of 1938, as amended, and the Act to provide conditions for the purchase of supplies and the making of contracts by the United States, approved June 30, 1936, as amended (41 U.S.C. 35-45), including reimbursement to State, Federal, and local agencies and their employees for inspection services rendered, and not to exceed \$3,000 for expenses of attendance of cooperating officials and consultants at conferences concerned with the work of the Division, [\$10,500,000] \$11,489,000."

Amounts available for obligation

	1959	1960
Enacted appropriation or estimate.....	\$10, 500, 000	\$11, 489, 000
Proposed for later transmission: For pay act costs authorized by Public Law 85-462.....	917, 000	None
Total direct appropriation or estimate.....	11, 417, 000	11, 489, 000

Obligations by activity

Description	1959		1960		Change	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Promotion of compliance and enforcement.....	1, 118	\$9, 320, 400	1, 118	\$9, 514, 100	-----	+\$193, 700
2. Wage standards and determinations.....	72	746, 000	60	631, 100	-12	-114, 900
3. Regulations and interpretations.....	21	153, 500	21	154, 200	-----	+700
4. Economic analysis and statistics.....	48	483, 200	48	484, 800	-----	+1, 600
5. Executive direction and management.....	21	248, 900	21	249, 900	-----	+1, 000
6. Central administrative services.....	78	465, 000	76	454, 900	-2	-10, 100
Total direct obligations.....	1, 358	11, 417, 000	1, 344	11, 489, 000	-14	+72, 000

Obligations by objects

	1959	1960	Change
Total number of permanent positions.....	1, 358	1, 344	-14
Average number of all employees.....	1, 329	1, 312	-17
01 Personal services.....	\$9, 041, 900	\$9, 117, 100	+\$75, 200
02 Travel.....	870, 000	850, 000	-20, 000
03 Transportation of things.....	40, 000	40, 000	None
04 Communication services.....	175, 000	187, 000	+12, 000
05 Rents and utility services.....	22, 000	22, 000	None
06 Printing and reproduction.....	111, 900	111, 900	None
07 Other contractual services.....	486, 700	486, 700	None
08 Supplies and materials.....	68, 800	68, 800	None
09 Equipment.....	25, 000	25, 000	None
11 Grants, subsidies, and contributions.....	573, 700	578, 500	+4, 800
15 Taxes and assessments.....	2, 000	2, 000	None
Total direct obligations.....	11, 417, 000	11, 489, 000	+72, 000

Summary of changes

Enacted appropriation-----	\$10,500,000
Proposed for later transmission—for increase in pay costs under Public Law 85-462-----	917,000
Total estimated funds available in 1959-----	11,417,000
Estimate for 1960-----	11,489,000
Total change-----	+72,000
Mandatory items:	
Increase in postal rates (Public Law 85-426)-----	+12,000
Annualization of 1959 base: For investigator and supervisor promotion costs-----	+151,400
Extra day of pay (261 days in 1959 and 262 days in 1960):	
Personal services-----	+35,600
Contributions to retirement fund-----	+2,300
Program decrease items:	
Change from annual to biennial review of Puerto Rico, Virgin Island, and American Samoa wage rates by Public Law 85-750 including decrease of 14 positions-----	-129,300
Administrative adjustments:	
Reduction of 39 positions (36.4 man-years of full-time personal services) from the number contemplated in the 1959 estimate	-145,140
Reduction in nonlabor resulting from adjustments to reflect most recent cost experience-----	-5,200
To provide for the change in average salary rates from the 1959 estimate due to regulated investigator and supervisor pro- motions, within-grade and grade-to-grade changes not in- cluded in 1959 estimate-----	+150,340
Net change-----	+72,000

PREPARED STATEMENT

Mr. Lundquist, we are glad to have you here, sir.

Mr. LUNDQUIST. Thank you.

Senator HILL. We have a statement which we will put in full in the record and you may summarize it anyway you see fit.

(The statement referred to follows:)

STATEMENT OF CLARENCE T. LUNDQUIST, ADMINISTRATOR, WAGE AND HOUR DIVISION

Mr. Chairman and members of the committee, our request for fiscal year 1960 is \$11,489,000, which will allow us to continue our programs at about the same level as this year's appropriation. Including a proposed supplemental request for pay act costs, the funds available in 1959 will be \$11,417,000. In 1960, we are requesting a net increase of \$72,000. There will be a reduction of 14 positions, all in the national office. In addition to providing for the extra day of pay and increased postal costs, the additional funds are required for two main changes over 1959: The first is the need for funds to annualize the promotions of 85 investigators from GS-11 to GS-12 and 77 investigation supervisors from GS-12 to GS-13. These promotions are being effected in fiscal year 1959 as a result of a comprehensive review of the classification standards for these positions by the Civil Service Commission. The second change is a savings as a result of Public Law 85-750. This amendment to the Fair Labor Standards Act placed the Puerto Rico, Virgin Islands, and American Samoa wage order program on a biennial review basis. Because of this change in the law, we will eliminate 14 positions in 1960. These savings to a large extent offset the additional funds needed for the reclassification of positions in the investigator group.

We have recently completed a minor change in our headquarters staff. The change merely combines and realines existing components and functions to provide more effective lines of authority to the Administrator.

ACTIVITIES IN FISCAL YEAR 1958 AND FIRST HALF OF FISCAL YEAR 1959

Investigation findings in 1958 were at about the same level as in 1957. They reflect the increasing success of our improved programing methods in finding violation.

In 1958, in spite of reduction in staff, we made 53,796 investigations, an increase of more than 5,000 over the previous year. The amount of back wages found due was over \$19.6 million, which is an increase of more than \$80,000 compared to 1957. Significantly, while the amount of overtime underpayments disclosed by investigations remained the same, the amount of minimum wage underpayments increased very substantially from \$5.3 million in 1957 to \$6.1 million in 1958. Other indicators of noncompliance were the continuation of a complaint inflow of over 10,000 annually, an increase in the number of minors found to be illegally employed in nonagricultural industries from less than 6,000 in fiscal year 1957 to over 7,000 in fiscal year 1958, and a 20 percent increase in the number of legal actions filed.

Our experience during the first 6 months of this fiscal year indicates that in 1959 we will complete about 54,000 investigations. We expect that these investigations will disclose about \$20 million in underpayments and that the amount of unpaid minimum wages will be higher than in 1958.

The program of formulating and issuing prevailing minimum wage determinations under the Public Contracts Act is now operating at the level of seven determinations per year and will be continued at that level in fiscal year 1960.

The Territorial wage order program in Puerto Rico, the Virgin Islands, and American Samoa will involve five series of industry committee hearings.

Our program of promoting voluntary compliance through information and education will be pursued in 1960 as vigorously as it has in the past. Typical of special projects completed was one involving approximately 25,000 U.S. mail-haul contractors who bid and receive contracts from the U.S. Post Office Department to haul mail. We found many of these contractors in violation of the act but they disclaimed knowledge of their responsibilities. We prepared an information leaflet dealing specifically with their problems and arranged for the Post Office Department and the National Star Route Mail Carriers' Association to distribute this informational aid to every contractor. Similar programs were undertaken in other areas to inform the public, such as the canning, telephone answering, direct mail and lettershop, insurance, lumber and pulpwood, dairy, grain, banking and finance, and highway-construction industries. We also completed a broad educational program directed toward the accountancy profession to take advantage of their contacts and responsibilities to employers. Through the cooperation of several national accountancy organizations, information about the law reached more than 120,000 members and readers of accountancy journals.

I must hasten to add that, however helpful this voluntary compliance program may be, no information program can substitute for physical on-the-spot investigations. Visiting plants, reviewing records, interviewing employees, direct discussions with employers, and resort to the courts where necessary, are the backbone of our compliance program. It is through these methods that the law and its benefits for employees and employers are effectuated.

IMPROVING THE INVESTIGATION PROGRAM

We are concerned with the level of noncompliance. We will continue to examine and reexamine the investigation policies and procedures with the objective of obtaining even more effective utilization of our investigative staff. Our investigation procedures have been improved. The basis for these improvements have been the elimination of certain procedural steps not deemed necessary in every investigation. The investigator has been given more discretion to conform the investigative steps to the circumstances of each case. The object of this is to spend enough time, but no more than enough time, to make a proper investigation. Continued efforts will be made to test out our procedures with a view toward further improvements.

Programing

The approach to investigation program planning was substantially changed in the latter half of fiscal year 1958. The divisions continue to investigate on complaint or on receipt of other direct indications that violations are probably occurring in specific establishments. The remainder of the program is planned on a field-office basis, and emphasis is placed on participation by supervisors and investigators in developing programs. The objective is to make maximum

use of their knowledge of local conditions, and to encourage them to be on the lookout for leads as to types of establishments in which violations are most likely to be occurring.

Investigation leads

Annually we receive information through complaints or otherwise indicating the probability of violation in about 15,000 establishments. We know that violations of a substantial nature exist in many of the remaining 885,000 establishments not complained against or otherwise reported as being in violation. Since we can investigate only a small portion of these establishments, it is important that we try to discover in advance which of these establishments are likely to be in violation. From our past experience we have some idea of the kinds of establishments, based on industry or area considerations, where violations are likely to be occurring. However, in addition to this we have been placing greater emphasis on a program whereby all the investigators stationed in various parts of the country channel to their supervisors any information that comes to their attention during the course of their work as to the likelihood of particular establishments being in violation. This permits more fruitful assignments and more efficient utilization of investigator time.

Saturation surveys

In three different geographical areas of the country we established procedures where almost every covered establishment in the areas was investigated. These investigations, of course, were made in much less time than normally because they were virtually on a door-to-door basis. We have not yet made a full evaluation of the efficiency and usefulness of this kind of an investigation program. However, we have found, on the basis of our limited experience, that these investigations result in better understanding and acceptance on the part of employers. In addition, the use of investigator time and travel funds is much more efficient. As the results of the surveys are more fully evaluated, we will make whatever further improvements in scheduling investigations that are indicated.

Staff distribution

We have refined our statistical tabulations so that we have periodic reports of investigation findings for each of 350 local areas. This information is used to gradually adjust the distribution of our investigation staff to meet enforcement needs.

Homework survey

A homework survey was conducted during calendar year 1958. This survey was made to correct violations occurring in homework situations, and to obtain information on the extent and nature of homework, and the extent to which homework may be possibly undermining the minimum wage. It involved investigation of a sample of establishments consisting of about half of the employers of homeworkers, and the obtaining of data on the extent of violation, on the characteristics of homeworkers and homework employment, and the extent to which homeworkers have alternative employment opportunities. An analysis of these investigations is being made and should be available by the end of the first quarter of calendar year 1959. A preliminary result has been an indication of an enforcement need which has led us to make many more investigations of employers of homeworkers in some industries and areas.

In conclusion, we will continue to direct all our investigative efforts toward the most effective enforcement of the Fair Labor Standards and Public Contracts Acts. We will also continue to evaluate our policies, procedures, and staff allocations and modify them, when necessary, to improve program results.

TOTAL INVESTIGATIONS

Mr. LUNDQUIST. I have a short statement. I merely would like to say that our appropriation request for fiscal year 1960 will allow us to continue our programs at about the same level as this year.

We are currently making between 50,000 and 55,000 investigations which disclose about \$20 million annually in unpaid back wages.

The only significant changes in the request are a reduction of 14 positions resulting from the recent amendment to the Fair Labor

Standards Act placing the Puerto Rican, Virgin Islands, and American Samoan program on a biennial basis.

We have also a provision for annualizing the promotions of investigators and supervisors affected by the change in civil service classification standards. This is about the summary of my statement, sir.

Senator HILL. Now, the \$72,000 increase takes care of, you say, the Puerto Rican, Virgin Islands, and Samoan situations and then the additional day and your postal increase?

Mr. LUNDQUIST. Yes.

Senator HILL. Is there anything else?

Mr. LUNDQUIST. We have, of course, the annualizing of promotion costs for investigators and supervisory positions.

Senator HILL. Your figures will show here that you will be getting less in 1960 than this present year, 1959, due to the increased cost which you have.

Mr. LUNDQUIST. That may be so. The total increased costs for 1960 amount to about \$201,000 and the savings from the change in frequency of review of territorial wage determinations absorbs about \$129,000. Thus we are asking for a net increase of the \$72,000 previously mentioned, with no provision for any program expansion. On the position side, there is a reduction of 14 positions in the territorial wage order program and no change in positions allocated to other program areas.

We feel that we will have no problem in this regard

IMPROVEMENT IN INVESTIGATIVE TECHNIQUES

We have been able to improve our investigative techniques; we are currently going at about the same rate as last year, in fact, a little bit more in the way of violations are being found.

This we attribute primarily to the know-how of our investigators and the techniques that we have tended to polish over the years.

Senator HILL. In other words, due to these things you have just enumerated you think your operations will be carried on as effectively in 1960 as they are this year?

Mr. LUNDQUIST. I do, Mr. Chairman.

Senator HILL. Let me ask you this about these violations: Are they pretty generally scattered so far as geography is concerned over different sections of the country, or do you find them lumped together in one section as contrasted to the other sections.

Mr. LUNDQUIST. We do find greater violations in the South. We find violations everywhere throughout the country, however. There are pockets, as we call them, of violations. They are occurring in major industrial areas as well as in nonmetropolitan areas, wherever those areas are.

We have a little larger staff proportionately in some of the Southern areas.

As I say, we do find substantial violations in the major cities of the North, as well.

Senator HILL. You are well satisfied, then, with the budget figures on this?

Mr. LUNDQUIST. We are satisfied that we can do an adequate job, yes. I think any enforcement agency always feels that they can use more. I would be remiss if I did not say that.

Senator HILL. But you think you can maintain pretty well the same standards of enforcement that you have at the present time?

Mr. LUNDQUIST. Yes. We have shown that to ourselves this year currently. We are going at the same rate or a little better than we did in 1958.

Senator HILL. We are certainly very much obliged to you, Mr. Lundquist. We appreciate your testimony.

The committee will stand in recess until tomorrow morning at 10 o'clock.

(Thereupon, at 2:25 p.m., Monday, April 27, 1959, the subcommittee recessed, to reconvene at 10 a.m., Tuesday, April 28, 1959).

DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION,
AND WELFARE APPROPRIATIONS FOR 1960

TUESDAY, APRIL 28, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met, at 10 o'clock a.m., pursuant to recess, in room F-82, the Capitol, Hon. Lister Hill (chairman of the subcommittee) presiding.

Present: Senators Hill and Byrd.

NATIONAL LABOR RELATIONS BOARD

STATEMENT OF BOYD LEEDOM, CHAIRMAN, ACCOMPANIED BY
J. NEAL TOMEY, DIRECTOR, DIVISION OF ADMINISTRATION; AND
CLARENCE S. WRIGHT, BUDGET OFFICER

APPROPRIATION ESTIMATE

"For expenses necessary for the National Labor Relations Board to carry out the functions vested in it by the Labor-Management Relations Act, 1947 (29 U.S.C. 141-167), and other laws, including [expenses of attendance at meetings concerned with the work of the Board when specifically authorized by the Chairman or the General Counsel;] *rental of temporary space in the District of Columbia*, and uniforms, or allowances therefor, as authorized by the Act of September 1, 1954, as amended (5 U.S.C. 2131) [; \$13,100,000], \$14,230,000: *Provided*, That no part of this appropriation shall be available to organize or assist in organizing agricultural laborers or used in connection with investigations, hearings, directives, or orders concerning bargaining units composed of agricultural laborers as referred to in section 2(3) of the Act of July 5, 1935 (29 U.S.C. 152), and as amended by the Labor-Management Relations Act, 1947, and as defined in section 3(f) of the Act of June 25, 1938 (29 U.S.C. 203), and including in said definition employees engaged in the maintenance and operation of ditches, canals, reservoirs, and waterways when maintained or operated on a mutual, nonprofit basis and at least 95 per centum of the water stored or supplied thereby is used for farming purposes."

Program and financing

	1958 actual	1959 estimate	1960 estimate
Program by activities:			
1. Field investigations.....	\$6,099,816	\$8,481,900	\$8,780,700
2. Trial examiner hearing.....	754,831	1,020,000	1,191,000
3. Board of adjudication.....	1,280,539	1,603,400	1,717,900
4. Securing of compliance with Board orders.....	1,609,458	2,168,700	2,540,400
5. 1959 program obligated in 1958.....	46,373	-46,373	-----
Total obligations.....	9,791,017	13,227,627	14,230,000
Financing:			
Unobligated balance no longer available.....	4,356	-----	-----
1959 appropriation available in 1958.....	-46,373	46,373	-----
New obligational authority.....	9,749,000	13,274,000	14,230,000
New obligational authority:			
Appropriation.....	9,749,000	13,100,000	14,230,000
Proposed supplemental due to pay increases.....	-----	174,000	-----

Object classification

	1958 actual	1959 estimate	1960 estimate
Total number of permanent positions.....	1, 193	1, 581	1, 581
Full-time equivalent of all other positions.....	1	6	2
Average number of all employees.....	1, 128	1, 399	1, 532
Number of employees at end of year.....	1, 148	1, 581	1, 581
Average GS grade and salary.....	8.9 \$6, 662	8.7 \$7, 084	8.7 \$7, 234
01 Personal services:			
Permanent positions.....	\$7, 951, 762	\$10, 056, 500	\$11, 126, 750
Positions other than permanent.....	3, 980	27, 250	7, 500
Other personal services.....	58, 022	97, 800	129, 050
Total personal services.....	8, 013, 764	10, 181, 550	11, 263, 300
02 Travel.....	515, 404	853, 900	921, 100
03 Transportation of things.....	32, 984	71, 700	47, 700
04 Communication services.....	243, 797	314, 000	340, 450
05 Rents and utility services.....	35, 574	116, 900	34, 100
06 Printing and reproduction.....	95, 498	308, 250	303, 750
07 Other contractual services.....	219, 329	336, 700	366, 900
Services performed by other agencies.....	13, 123	56, 900	14, 600
08 Supplies and materials.....	96, 754	154, 500	156, 950
09 Equipment.....	15, 858	276, 100	130, 300
11 Grants, subsidies, and contributions.....	447, 793	573, 600	630, 200
13 Refunds, awards, and indemnities.....	2, 870	10, 000	-----
15 Taxes and assessments.....	11, 896	19, 900	20, 650
1959 program obligated in 1958.....	46, 373	-46, 373	-----
Total obligations.....	9, 791, 017	13, 227, 627	14, 230, 000

SUMMARY OF CHANGES

Enacted appropriation, fiscal year 1959.....	\$13, 100, 000
President's request for supplemental appropriation to cover increased pay costs under Public Law, 85-462 ¹	174, 000
Total estimated funds available in 1959.....	13, 274, 000
Estimate for 1960.....	14, 230, 000
Net change.....	+ 956, 000

SYNOPSIS OF CHANGES

A. Mandatory items.....	+ \$1, 104, 641
B. Administrative items.....	- 285, 641
C. Program items.....	+ 137, 000
Net change.....	+ 956, 000

DETAILS OF CHANGES

A. Mandatory items:	
I. Annualization of positions to a full-year basis in 1960 (due to normal delays in the 1959 recruitment program, 432 positions will result in only 274.8 man-years; during 1960 those same 432 positions will require funds equivalent to 414.2 man-years):	
(a) 01 Personal services.....	+ \$801, 009
(b) Other related expenses ²	+ 39, 480
II. Extra day of pay (during fiscal year 1959, employees on the roll for the full year are paid for 261 days; during 1960, such employees will be paid for 262 days—an extra day of pay):	
(a) 01 Personal services.....	+ 53, 150
(b) Other related expenses ²	+ 2, 770

See footnotes at end of table, p. 114.

DETAILS OF CHANGES—continued

A. Mandatory items—Continued

III. Annualization of 1959 grade and within-grade promotions to full-year basis in 1960 (promotions effective at various times during fiscal year 1959 require funds for a full year during 1960. Provision has been made in this category for 280 grade promotions and 324 within-grade promotions):	
(a) 01 Personal services	+\$171, 341
(b) Other related expenses ²	+9, 236
IV. Increased costs due to 308 within-grade promotions estimated to be effective during fiscal year 1960—	
(a) 01 Personal services	+25, 895
(b) Other related expenses ²	+1, 230
V. Annualization of salary rate increases made effective during 1959 by the International Lithographic Wage Board—	
(a) 01 Personal services	+500
(b) Other related expenses ²	+30
Total, mandatory items	<u>+1, 104, 641</u>

B. Administrative items:

I. Costs for which the agency will be reimbursed in 1959, but for which no reimbursement arrangements are estimated during 1960:	
(a) 01 Personal services	+\$10, 700
(b) Other related expenses ²	+2, 200
II. Cost of 144 grade promotions estimated to be effective during fiscal year 1960:	
(a) 01 Personal services	+96, 416
(b) Other related expenses ²	+4, 029
III. Reductions resulting (1) from estimating additional 6.5 man-years of lapse in 1960 and (2) from abolishing one 1959 position in 1960:	
(a) 01 Personal services	—35, 561
(b) Other related expenses ²	—2, 310
IV. Savings due to reduction in 1960 of estimated paid overtime	
	—22, 300
V. Estimated cost of converting approximately 30 employees from social security coverage in 1959 to Federal retirement coverage in 1960	
	+6, 145
VI. Other administrative changes:	
(a) 02 Travel	—9, 900
(b) 03 Transportation of things	—24, 000
(c) 05 Rents and utility services (resulting from assumption of all 1959 contract office space rentals by General Services Administration in 1960)	—83, 100
(d) 06 Printing and reproduction	—18, 300
(e) 07 Other contractual services (primarily resulting from reduction in the need for full-field security investigations)	—55, 060
(f) 08 Supplies and materials	+1, 200
(g) 09 Equipment	—145, 800
(h) 13 Refunds, awards, and indemnities (agency incentive and suggestion awards program)	—10, 000
Total, administrative items	<u>—285, 641</u>

See footnotes at end of table, p. 114.

DETAILS OF CHANGES—continued

C. Program items:

Activity 1. Field investigation: Including informal disposition or preparation for formal processing. Decrease in intermittent employment and increases primarily in travel, communication services, and costs of conducting hearings before agency hearing officers and trial examiners, and other minor adjustments in miscellaneous expenses. This net increase is necessary to support the additional work to be performed as a result of annualization of new 1959 positions into fiscal year 1960-----	+ \$56, 549
Activity 2. Trial examiner hearing: Primarily of unfair labor practice cases. Increases primarily in travel and communication services with minor adjustments in other miscellaneous expenses are necessary to augment the increased work program and higher average employment estimated to be available for this activity in 1960-----	+ 23, 644
Activity 3. Board adjudication: Minor adjustments in miscellaneous expenses, primarily in communications services, are required to support the accelerated work program and higher average employment of Board members' staffs and related units-----	+ 530
Activity 4. Securing of compliance with Board orders: Including enforcement through court orders. Decrease in intermittent employment and increases in travel, communication services, court litigation printing, and other contractual services. Net increase necessary to support the additional work to be performed by the field staff and division of law as a result of annualization of new 1959 positions into fiscal year 1960-----	+ 56, 277
Total, program items-----	+ 137, 000

¹ House of Representatives reduced President's request by 10 percent, or \$17,400, to \$156,600 (H.R. 5916¹ H. Rept. 238).

² Includes only employer contributions for (a) Federal employees life insurance (rate of \$3.25 per thousand of employee annual salary), (b) Federal employees retirement fund (rate of 6½ percent of employee base pay), (c) social security payments (calendar year 1958, rate of 2¼ percent of first \$4,200 of earnings; calendar year 1959, rate of 2½ percent of first \$4,800 of earnings; calendar years 1960-62, rate of 3 percent of first \$4,800 of earnings; all rates in accordance with Public Law 85-840).

PREPARED STATEMENT

Senator HILL. The committee will please come to order.

Judge, we shall be delighted to have you proceed in your own way, sir.

Mr. LEEDOM. Senator, I have prepared and previously submitted to you a statement.

Senator HILL. We will put that in the record in full.

Mr. LEEDOM. Fine.

(The statement referred to follows:)

Gentlemen, when we appeared before you last year, this committee indicated two major problems with which it was concerned—

1. The so-called "no-man's land" in jurisdiction over labor-management relations.

2. The delay experienced in processing cases brought to the National Labor Relations Board.

With these two specific problems in mind and with an understanding of the work problems of the agency, the Congress provided the National Labor Relations Board with a large increase in appropriations for fiscal year 1959 to enable us to do a better job.

Since then we have concentrated on these problems, and I would like to take this opportunity to report to you on what is being accomplished with the assistance of the current appropriation.

1. Change in Board's exercise of jurisdiction

Last fall, after careful consideration, of all the complex issues involved, the National Labor Relations Board changed its standards for exercise of Federal jurisdiction under the statute. (For a summary of the new standards compared with previous standards, see exhibit I.)

One immediate effect of this change has been the reduction of the "no man's land" existing between (a) the National Labor Relations Board's exercise of Federal jurisdiction under the statute and (b) State jurisdiction in labor-management relations matters, as defined by Supreme Court decision. The other effect, of course, has been to add substantially to this agency's already high workload.

Since the Board's extension of the exercise of its jurisdiction (effective October 2, 1958) the agency has received approximately 1,800 case filings which would not have been accepted under the old standards for exerting jurisdiction. Moreover, for the period October 1958 through March 1959 the agency has received approximately 1,000 cases which have not yet been statistically identified. It is probable that no less than 200 of these 1,000 unidentified cases were accepted by the regional offices of the agency as a result of the new jurisdictional standards. Thus, after all statistics for the first 6 months experience under the new jurisdictional standards have been collated, the National Labor Relations Board will probably have received approximately 2,000 cases, which formerly would have been in the "no man's land."

In addition, the Board is currently considering proposed new standards for exerting jurisdiction over the hotel industry in accordance with the recent Supreme Court decision in the Hotel Employees case. The possible impact on case intake of this proposed extension of jurisdiction cannot be gauged at this early date.

2. Delay in processing cases

As a part of the total workload picture, the general problem of delay is described in our written submission. However, in response to previous expressions of concern by this committee, I would like to take this opportunity to discuss the agency's delay problems candidly and realistically and with special reference to current progress and future time-elapsed targets.

The appropriation you gave us for the current year coupled with the budget request now before you provides for funds that would assist us in working toward the goal of disposing of the great bulk of those unfair labor practice cases requiring a Board decision in less than 9 months after a charge is filed. I wish that we could hold out hope for more speed, but I do not think it would be realistic to do so.

I want to indicate, however, what goals are reasonable and attainable within the framework of the Taft-Hartley Act and the Administrative Procedure Act, assuming sufficient staff and funds are available. Therefore, I refer to the material presented on pages 16 and 17 of the agency's formal justifications which are before you. On these pages are described the time-elapse goals we want to achieve in unfair labor practice cases.

Under the targets outlined on page 16—which is, of course, within the General Counsel's area of final responsibility—the major portion of the agency's workload would move to a conclusion in less than 75 days from the time a charge is filed.

The program outlined on page 17 is of more direct concern to the Board members since the four consecutive stages described thereon encompass those charges which will ultimately require a decision by the Board. The time goals specified for the different stages of case processing add up to 250 calendar days, or 8½ months, from filing of charge to Board decision.

If the committee has any questions concerning the experience or targets in these different stages, I will be pleased to discuss these in greater detail or to answer specific questions. In summary, it should be noted that these targets, in order to be realistic, had to give recognition to the statutory and administrative delays necessary to assure due process, the need for adequate preparation time for the parties, and a highly efficient but reasonable time elapse factor for agency employees processing the case.

At one time or another in the recent past, under favorable conditions in each of the first three stages the agency has achieved, or has come close to achieving these targets. (See chart No. 6 facing p. 17 of agency's budget justifications.) In the last stage (from issuance of intermediate report to issuance of Board

decision), however, the chart referred to above shows that experience since fiscal year 1953 never was very close to the target of 90 days, or 3 months. As a matter of fact, I do not believe the Board has ever achieved such a low time elapsed performance over an extended period of time.

One of the problems at this stage is the large proportion of time elapse that must be allowed for the parties to file exceptions to the intermediate report before a Board member's legal assistant can efficiently begin work on the case. One third of the 90-day target, or approximately 30 days is estimated to be the minimum time that the parties can be allowed in the average case. This leaves only 60 days for the Board to complete this stage of processing which, in addition to an occasional oral argument before the Board, includes reading and analyzing of the entire record, finding the relationship of the parties' exceptions and briefs, resolving differences of judgment among Board members on factual and legal policy issues, and drafting and issuing of the decision.

The assumption that we can do all this work within a 90-day target (actually within 60 days) for the average case is valid only if we can have a large enough staff of legal assistants so that analysis of the record can commence almost immediately upon filing of the exceptions by the parties. As recently as last year, our staff was not large enough to permit such work to start until several months after exceptions were filed—this meant that a legal assistant did not begin work on most decisions until 4 or 5 months (compared with a total target to complete of 3 months) had elapsed after the intermediate report was issued. Last summer we enlarged our staff of legal assistants; we are now able to begin work on an unfair labor practice decision within about 1 week after exceptions are filed. As the volume of intermediate reports issued by trial examiners increases, we will have to hire more legal assistants in order to maintain the current condition which will enable achievement of the time-elapsed target. This consideration has already been incorporated in the plans and estimates for fiscal year 1959 and has been projected on a full-year basis in the budget request before you now for fiscal year 1960.

By their nature, representation cases on the average can be handled much more quickly than can unfair labor practice cases. At present the time elapsed from filing of a petition to close of hearing is slightly less than 1 month. This the agency believes, is about as good as can be expected keeping in mind the need for doing an efficient quality job at the same time.

The second processing stage of representation cases requiring Board decision is from close of hearing to issuance of Board direction of election or of Board decision. In fiscal year 1957 the average case required 65 days, or 2.2 months, in this stage. Time delay of this magnitude, of course, is not appropriate under ordinary circumstances. As a matter of fact, the Board did trim 10 days from this delay picture during fiscal year 1957, and at present this stage is taking just slightly more than 1½ months. However, the Board believes that even this is not quite enough. Therefore, we have set as a target the completion of this stage by an average representation case within 1¼ to 1½ months.

The last stage in the processing of a representation case (requiring a Board decision) covers the period from Board direction of election to agency close of case. This stage then includes the problems of arranging for and conducting the Board-ordered election and the certification of the results of the election; it also includes, when necessary, work in connection with objections or challenges in the election by the parties. Since the greater part of a month is normally necessary to arrange for the time and place of election and to provide reasonable notice to all eligible employees, the agency believes that the current experience of just slightly more than 1 month from Board direction of election to close of case is as reasonable as can be expected.

In summary, therefore, the agency time-elapse target on representation cases is approximately 2 to 2½ months from filing to Board decision with an additional month to conduct the election and close the case.

In contrast to this, is the situation in which the parties consent to an election without requiring a Board decision. In this type of processing (and we handle twice as many of these as of those requiring Board decisions), the average case takes only 1⅓ to 1½ months from beginning to end—or about 2 months faster than a representation case requiring Board decision. This is, of course, the preferred method to settle quickly a question of representation. We do not think we can improve much on the experience record of less than 1½ months.

Before concluding my remarks, which have probably taken too much of the committee's time already, I should like to say a few words about the current case

intake situation and the efforts made by the National Labor Relations Board to keep abreast of this intake.

During the first 9 months of fiscal year 1959 the agency has already received 9,311 unfair labor practice charges. This current 9-month experience exceeds the 9,260 charges filed during all of fiscal year 1958. At the present rate of intake the charges filed with the National Labor Relations Board will top the President's budget estimate of 12,650 charges to be received in fiscal year 1959 by approximately 200. At this pace, the President's estimate of 13,200 charges to be filed in fiscal year 1960 will be exceeded by 300 to 400 charges.

In the area of representation petitions the President's case intake estimates may also prove conservative. During the first 9 months of fiscal year 1959 the agency has received 6,614 representation petitions. Should the present rate of intake continue the National Labor Relations Board will receive in fiscal year 1959 approximately 600 to 700 representation petitions in excess of the 8,300 forecast in the President's budget. In fiscal year 1960, at the current rate of intake, the President's estimate of 8,600 petitions would be topped by 800 to 900 representation petitions.

Whether the current rate of case intake will continue is difficult to forecast. Suffice it to say that on the basis of 9 month's experience in fiscal year 1959 the President's estimates of case intake have not proven to be exaggerated.

The National Labor Relations Board has made every effort to keep abreast of its mounting workload in fiscal year 1959 and believes that it can begin to make inroads into its backlog in fiscal year 1960 with an appropriation of \$14,230,000, unless case intake jumps to even higher levels.

This belief is predicated upon the fact that while case intake has risen, case output has also shown an increase. In the first 9 months of fiscal year 1959 the agency closed 8,346 unfair labor practice cases and 6,226 representation cases. Unfair labor practice case closings in the first 9 months of fiscal year 1959 exceeded closings for a comparable period of fiscal year 1958 by approximately 3,400 cases. Representation case closings in the first 9 months of fiscal year 1959 exceeded closings for a comparable period in fiscal year 1958 by 800 cases.

In summary I can report to this committee the following: (1) The National Labor Relations Board has taken a major step to reduce the area of the no man's land in fiscal year 1959; (2) the agency is extremely conscious of its time delay problem in processing cases and is moving gradually toward achievement of time elapsed targets; (3) the President's estimates of case intake have proven to be solid and may be on the conservative side; and (4) case output by the agency has increased due to increased employment and productivity.

EXHIBIT I

STANDARDS ESTABLISHED BY THE NATIONAL LABOR RELATIONS BOARD FOR EXERCISE OF FEDERAL JURISDICTION UNDER THE LABOR-MANAGEMENT RELATIONS ACT OF 1947, AS AMENDED

Effective October 2, 1958, the National Labor Relations Board established the following revised standards for determining in which cases it will exercise jurisdiction.

1. Nonretail: \$50,000 outflow or inflow, direct or indirect.¹
 (1954: \$50,000 outflow, \$500,000 inflow, \$100,000 indirect outflow, \$1 million indirect inflow.)²
 (1950: \$25,000 outflow, \$500,000 inflow, \$50,000 indirect outflow, \$1 million indirect inflow.)²
2. Office buildings: Gross revenue of \$100,000 of which \$25,000 or more is derived from organizations which meet any of the new standards.
 (1954: Employer who leases or owns and who operates must be otherwise in commerce and utilize building primarily to house its own offices.)²
 (1950: \$50,000 from tenants in commerce.)²
3. Retail concerns: \$500,000 gross volume of business.
 (1954: Direct inflow of \$1 million, or indirect inflow of \$2 million or direct outflow of \$100,000.)²
 (1950: Same as nonretail.)²

See footnotes at end of table, p. 118.

4. Instrumentalities links and channels of interstate commerce: \$50,000 from interstate (or linkage) part of enterprise, or from services performed for employers in commerce.
(1954: \$100,000.)²
(1950: No requirement other than legal jurisdiction.)²
5. Public utilities: \$250,000 gross volume, or meet standard 1 (nonretail).
(1954: \$3 million gross volume.)²
(1950: No requirement other than legal jurisdiction.)²
6. Transit systems³: \$250,000 gross volume.
(1954: \$3 million gross volume.)²
(1950: No requirement other than legal jurisdiction.)²
7. Newspapers and communication systems: Radio, television, telegraph and telephone, \$100,000 gross volume. Newspapers, \$200,000 gross volume.
(1954: \$500,000 test for newspapers, \$200,000 for the others.)²
(1950: No requirement other than legal jurisdiction.)²
8. National defense: Substantial impact on national defense.
(1954: \$100,000 in goods or services directly related to national defense, and pursuant to Government contract.)²
(1950: Substantially affecting the national defense.)²
9. Business in the Territories and District of Columbia: District of Columbia: ----- plenary; territories, ----- standards apply.
(Same as 1954.)²
Same as 1954. In 1950, plenary as to both territories and District of Columbia.
10. Associations: Regarded as single employer.
(Same as 1954 and 1950.)²

¹ Direct outflow refers to goods shipped or services furnished by the employer outside the State. Indirect outflow includes sales within the State to users meeting any standard except solely an indirect inflow or indirect outflow standard. Direct inflow refers to goods or services furnished directly to the employer from outside the State in which the employer is located. Indirect inflow refers to the purchase of goods or services which originated outside the employer's State but which he purchased from a seller within the State. Direct and indirect outflow may be combined and direct and indirect inflow may also be combined to meet the \$50,000 requirement. However, outflow and inflow may not be combined.

² For easier understanding of the significance of the new standards, comparable prior standards are shown in parentheses. Those standards identified as 1954 became effective in July 1954; those identified as 1950 were announced during the latter half of 1950.

³ Except taxicabs, as to which the retail (\$500,000 gross volume of business) test shall apply.

PREVIOUS APPROPRIATION

Mr. LEEDOM. I think I have nothing to add to that except if there have developed some problems that our justification and statement do not cover.

Senator HILL. We gave you a good deal more money last year?

Mr. LEEDOM. Yes.

Senator HILL. Quite a bit more. What were the results of that action?

Mr. LEEDOM. We have used the money we think to very good advantage. It has enabled us to begin to cope with this terrific increase we have in our caseload.

This year's request and justification is geared to the performance that is possible under the allowance you made us last year, which was an increased allowance.

The request this year simply would enable us to carry on with the program that you made possible for this year.

Senator HILL. I have before me the report of the Subcommittee on Appropriations of the House. I believe the bill will go before the full committee this morning.

HOUSE ALLOWANCE

As far as the subcommittee action is concerned, they have allowed you the budget estimate, the full \$14,200,000. That will enable you to

carry on this year on the enlarged program which the additional funds made possible for this year; is that right?

Mr. LEEDOM. That is right.

Senator HILL. Do you think that will be satisfactory?

Mr. LEEDOM. We think that will be satisfactory.

We think the extra money you gave us last year has put us in very good position to meet this unusual load. The request this year will be adequate if we can get the amount we requested.

REDUCTION OF BACKLOG

Senator HILL. Are you now able to cut down some bit your time factor and catch up on some of the backlog?

Mr. LEEDOM. Yes, sir; we have definitely set improved targets on time and the trend is definitely toward the target. We have done, we think, an unusual job of cutting down time.

Senator HILL. In other words, you feel gratified over what you have been able to do this year?

Mr. LEEDOM. We certainly do. We are delighted with the reception we had from the Senate and the House last year and believe it has put us in a much better position to do an adequate job.

Senator HILL. With the fund recommended in the budget for 1960, you will be able to carry on in the same way?

Mr. LEEDOM. Right, and more right on up to the target.

Senator HILL. Fine. Thank you very much, Judge.

Mr. LEEDOM. Thank you, sir.

NATIONAL MEDIATION BOARD

STATEMENT OF FRANCIS A. O'NEILL, JR., MEMBER, AND THOMAS A. TRACY, ASSISTANT EXECUTIVE SECRETARY

APPROPRIATION ESTIMATE

"For expenses necessary for [the National Mediation Board, \$520,000] carrying out the provisions of the Railway Labor Act, as amended (45 U.S.C. 151-188), including stenographic reporting services as authorized by section 15 of the Act of August 2, 1946 (5 U.S.C. 55a); temporary employment of referees under section 3 of the Railway Labor Act, as amended, at rates not in excess of \$75 per diem; and emergency boards appointed by the President pursuant to section 10 of said Act (45 U.S.C. 160); \$1,357,000: Provided, That the unexpended balances of appropriations for the fiscal years 1958 and 1959 for "Salaries and expenses", 'Arbitration and emergency boards', and 'Salaries and expenses, National Railroad Adjustment Board', shall be merged and accounted for in one account."

Program and financing

	1958 actual	1959 estimate	1960 estimate
Program by activities:			
1. Mediation.....	\$505, 845	\$544, 500	\$552, 500
2. Voluntary arbitration and emergency disputes.....	238, 436	250, 000	250, 000
3. Adjustment of railroad grievances.....	547, 674	552, 500	554, 500
4. 1959 program obligated in 1958.....	3, 000	-3, 000	-----
Total obligations.....	1, 294, 955	1, 344, 000	1, 357, 000
Financing:			
Comparative transfers from (-) other accounts.....	-786, 110	-802, 000	-----
1959 appropriation available in 1958.....	-3, 000	3, 000	-----
Unobligated balance no longer available.....	1, 001	-----	-----
New obligational authority.....	506, 846	545, 000	1, 357, 000
New obligational authority:			
Appropriation.....	506, 846	520, 000	1, 357, 000
Proposed supplemental due to pay increases.....	-----	25, 000	-----

Object classification

	1958 actual	1959 estimate	1960 estimate
Total number of permanent positions.....	90	90	90
Full-time equivalent of all other positions.....	7	7	7
Average number of all employees.....	102	106	106
Number of employees at end of year.....	115	112	112
Average GS grade and salary.....	8. 9 \$6, 928	9. 0 \$7, 562	8. 8 \$7, 136
01 Personal services:			
Permanent positions.....	\$608, 990	\$658, 890	\$668, 110
Positions other than permanent.....	325, 225	342, 600	342, 600
Other personal services.....	2, 164	2, 230	5, 240
Total personal services.....	936, 379	1, 003, 720	1, 015, 950
02 Travel.....	174, 777	181, 500	181, 500
03 Transportation of things.....	226	150	150
04 Communication services.....	24, 489	23, 080	23, 800
05 Rents and utility services.....	9, 610	4, 500	4, 500
06 Printing and reproduction.....	72, 455	54, 000	53, 500
07 Other contractual services.....	13, 078	15, 200	15, 200
08 Supplies and materials.....	6, 183	10, 979	8, 500
09 Equipment.....	13, 126	6, 621	6, 200
11 Grants, subsidies, and contributions.....	37, 753	43, 350	43, 800
15 Taxes and assessments.....	3, 879	3, 900	3, 900
1959 program obligated in 1958.....	3, 000	-3, 000	-----
Total obligations.....	1, 294, 955	1, 344, 000	1, 357, 000

PREPARED STATEMENT

Senator HILL. Now, the National Mediation Board. It is nice to have you gentlemen back with us again. We welcome you here.

You have a prepared statement, Mr. O'Neill?

Mr. O'NEILL. Yes, Mr. Chairman.

Senator HILL. We will place the statement in full in the record.

(The statement referred to follows:)

The National Mediation Board is the agency designated by Congress to administer the Railway Labor Act governing labor relations in the railroad and airline industries. This legislation has been in effect since 1934. It establishes the duties of parties and enunciates procedures for the orderly handling of labor relations problems arising in both the railroad and airline industries.

Activities under this legislation consist of the mediation of labor disputes and the determination of collective bargaining representatives by the National Mediation Board, the resolution of differences through arbitration and special board of adjustment, the investigation by Presidential emergency boards of disputes which threaten substantially to interrupt interstate commerce so as to deprive any section of the country of essential transportation service and the adjustment by the National Railroad Adjustment Board of railroad employees' grievances resulting from application of collective-bargaining agreements.

The estimate of appropriation for these three activities is presented this year for the first time as a single appropriation. This procedure has been approved by the Bureau of the Budget and was adopted in order to simplify the budget structure and financing of the several activities authorized by the Railway Labor Act.

There are approximately 700 carriers and 1¼ million employees in the airline and railroad industries. The total authorized personnel of the National Mediation Board is 40 employees, including 3 members appointed by the President and confirmed by the Senate. The remaining are classified civil service employees.

The estimate for the National Railroad Adjustment Board provides for 50 employees, the same as the current year. This appropriation request does not provide for the addition of any new employees for either Board.

The total appropriation requested for these activities for fiscal year 1960 is \$1,357,000 which represents a total increase of \$13,000 (including an adjustment of \$3,000 authorized for expenditures in fiscal 1958 from the 1959 program) over the amount estimated for fiscal 1959 \$1,344,000. Personal service costs due to Public Law 85-462 account for this increased request.

For the mediation activities formerly carried under the account "National Mediation Board," an increase of \$8,000 is requested. The estimated expenditures for 1959, are \$544,500 as compared to \$552,500 requested for fiscal 1960.

The estimate for the Arbitration and Emergency Boards is a contingent fund. It is quite difficult to forecast with any degree of accuracy the number of boards which may be required in any fiscal year as this depends on emergency situations threatening interstate commerce. We are asking \$250,000 for this activity for fiscal 1960, the same amount we have for fiscal 1959.

For activities of the National Railroad Adjustment Board \$554,500 is requested for fiscal 1960, an increase of \$2,000 over \$552,500, the amount estimated for 1959.

COMBINED BUDGET

Mr. O'NEILL. Mr. Chairman, I ask that the statement, together with our justification, be incorporated in the record.

I might point out the highlights of this statement.

Senator HILL. All right.

Mr. O'NEILL. I want to say to the committee that for the first time we have a combined budget for the National Mediation Board, and the National Railroad Adjustment Board.

The purpose of this combined budget is to facilitate the operations of both boards in that if there happens to be unusual activity in one branch of the work, why, we will be able to draw upon funds in another branch of the work.

Of course, all of this is under the direct supervision of the Bureau of the Budget.

Getting back to cases, Mr. Chairman, it would obviate the necessity of coming back to you each year. Over the past 6 years—let me put it that way—we have always had to come back to the committee of the Senate and to the House and ask for transfer of funds. We, therefore, never go over the amount that Congress has appropriated, but it will help in keeping ourselves current rather than have delays waiting for action by the Congress.

Senator HILL. As I recall, you have never been denied this permission for transfer, have you?

Mr. O'NEILL. We never have, sir. That is correct.

Senator HILL. You have always stayed within the overall amount appropriated?

Mr. O'NEILL. That is correct, Mr. Chairman.

As to the specific amounts the only addition is \$13,000 over the appropriation for last year and almost every penny of that is necessary to meet the statutory pay increases which were put through by the Congress last year.

Eight thousand dollars for the Mediation Board, and I think \$2,000 for the National Railroad Adjustment Board.

HOUSE ALLOWANCE

Senator HILL. I notice a figure here in the report of the House committee—the sum total of \$15,200. In other words, last year \$1,341,000; this year \$1,357,000. What would be that addition for?

Mr. O'NEILL. That is the addition. It is \$1,357,000. That is an increase of \$13,000.

Senator HILL. You have \$100,000 and something else? It is in the bill now.

Mr. O'NEILL. But it is not in this budget here, Senator.

Senator HILL. That bill has passed the House, as you know, and it has been approved by the Senate committee. It is due to be taken up today. In fact, it was due to be taken up yesterday, but we did not get quite to it.

Is there anything else you would like to add, Mr. O'Neill?

Mr. O'NEILL. No, I believe that about covers the situation, Mr. Chairman.

ANTICIPATED WORKLOAD

Senator HILL. Is your board pretty busy these days?

Mr. O'NEILL. I say we are—1959 is really going to be something. All these railroad contracts will open up. We are still having trouble with the airlines, the jet age, and so forth.

Senator HILL. In other words, you look for a pretty heavy load this year?

Mr. O'NEILL. This year is going to be tremendous.

As far as mediation activity and negotiations of contracts, in the railroad industry.

Senator HILL. Due to the fact that so many contracts expire during this next period?

Mr. O'NEILL. They expire October 30, but the notices have already been received. The goal will be to get the settlements before November.

Senator HILL. They are already in negotiation now?

Mr. O'NEILL. Yes, dates have been fixed for negotiation. They will move along, I imagine, the early part of the summer. They might be getting a little heat in the situation.

Senator HILL. That is when they call in the firemen?

Mr. O'NEILL. Yes.

Senator HILL. Thank you, gentlemen, very much.

Mr. O'NEILL. Thank you, Mr. Chairman.

Senator HILL. Now, the Railroad Retirement Board.

RAILROAD RETIREMENT BOARD

STATEMENT OF HOWARD W. HABERMEYER, CHAIRMAN, ACCOMPANIED BY HORACE W. HARPER, MEMBER; FRANK J. McKENNA, CHIEF EXECUTIVE OFFICER; AND MICHAEL RUDISIN, DIRECTOR OF BUDGET AND FISCAL OPERATIONS

APPROPRIATION ESTIMATE

"LIMITATION ON SALARIES AND EXPENSES

"For expenses necessary for the Railroad Retirement Board, including [expenses of attendance at meetings concerned with the work of the Board, when specifically authorized by the Board; and] uniforms or allowances therefor, as authorized by the Act of September 1, 1954 (68 Stat. 1114) [; \$8,450,000], \$9,460,000, to be derived from the railroad retirement account."

Program and financing

	1958 actual	1959 estimate	1960 estimate
Program by activities:			
1. Maintenance of earnings accounts.....	\$370, 371	\$435, 388	\$534, 304
2. Processing claims.....	6, 036, 585	6, 555, 688	6, 664, 553
3. Maintenance of beneficiary rolls.....	981, 684	1, 039, 527	1, 161, 577
4. Hearings and appeals.....	47, 948	52, 541	51, 000
5. Actuarial services.....	156, 877	164, 230	154, 429
6. Administration.....	818, 597	907, 626	894, 137
7. 1959 program obligated in 1958.....	21, 008	-21, 008	-----
Total obligations.....	8, 433, 070	9, 133, 992	9, 460, 000
Financing:			
1959 limitation available in 1958.....	-21, 008	21, 008	-----
Unobligated balance no longer available.....	938	-----	-----
Limitation.....	8, 413, 000	8, 450, 000	9, 460, 000
Proposed increase in limitation due to pay increases.....	-----	705, 000	-----

Object classification

	1958 actual	1959 estimate	1960 estimate
Total number of permanent positions.....	1, 448	1, 423	1, 429
Full-time equivalent of all other positions.....	29	27	24
Average number of all employees.....	1, 296	1, 327	1, 341
Number of employees at end of year.....	1, 362	1, 382	1, 389
Average GS grade and salary.....	6. 1 \$4, 667	6. 1 \$5, 235	6. 1 \$5, 228
01 Personal services:			
Permanent positions.....	\$6, 216, 140	\$6, 783, 180	\$6, 807, 568
Positions other than permanent.....	92, 130	110, 621	101, 407
Other personal services.....	164, 616	182, 905	189, 839
Total personal services.....	6, 472, 886	7, 076, 706	7, 098, 814
02 Travel.....	194, 937	223, 554	220, 155
03 Transportation of things.....	13, 558	13, 587	15, 115
04 Communication services.....	54, 053	54, 091	55, 023
Penalty mail costs.....	315, 500	331, 000	458, 100
05 Rents and utility services.....	442, 535	501, 971	542, 179
06 Printing and reproduction.....	61, 875	61, 269	63, 967
07 Other contractual services.....	164, 907	156, 158	200, 631
Services performed by other agencies.....	123, 678	118, 720	125, 181
08 Supplies and materials.....	121, 681	122, 344	163, 219
09 Equipment.....	41, 470	47, 056	61, 442
11 Grants, subsidies, and contributions.....	399, 950	442, 365	449, 650
13 Refunds, awards, and indemnities.....	2, 869	3, 683	3, 641
15 Taxes and assessments.....	2, 163	2, 496	2, 883
1959 program obligated in 1958.....	21, 008	-21, 008	-----
Total obligations.....	8, 433, 070	9, 133, 992	9, 460, 000

PREPARED STATEMENT

Senator HILL. We are happy to have you here. We will be glad to have you proceed in your own way.

Mr. HABERMEYER. We have a statement, Mr. Chairman, which we would like to have incorporated in full in the record.

Senator HILL. All right, we will incorporate the statement in full in the record.

(The statement referred to follows:)

Mr. Chairman and members of the committee, the Railroad Retirement Board administers the Railroad Retirement Act and the Railroad Unemployment Insurance Act. One act provides a retirement system for the payment of annuities to railroad employees retiring because of age or disability, annuities to wives and dependent husbands, and annuities and other benefits to their survivors. The other act provides an unemployment and sickness insurance system for paying unemployment, sickness, and maternity benefits to qualified railroad workers, and for placing unemployment benefit claimants in jobs.

The Board is composed of three members appointed by the President, by and with the advice and consent of the Senate—one upon the recommendation of representatives of employees, one upon the recommendation of representatives of carriers, and one, the Chairman, without recommendation by either employees or carriers. The organization of the Board is so designed as to integrate the administration of the programs conducted under the provisions of the Railroad Retirement Acts with programs conducted under the Railroad Unemployment Insurance without duplicating facilities or operations.

The self-supporting unemployment and sickness insurance system is financed by contributions paid wholly by employers. Contributions are required on compensation up to \$350 a month paid to railroad employees. The rate at which contributions are paid depends on the balance in the railroad unemployment insurance account. For 1958, the rate was 2½ percent. For compensation paid in 1959 the contribution rate is 3 percent, the maximum rate payable under the Railroad Unemployment Insurance Act. Of the total contributions receipts, the portion represented by 0.2 percent of the taxable payroll is permanently appropriated to the Board to cover administrative expenses and the remainder is credited to the railroad unemployment insurance account in the unemployment trust fund to cover benefit payments.

Taxes for the support of the railroad retirement system are paid equally by employers and employees. The present combined tax rate is 12½ percent, the maximum payable under the act, and applies to all compensation up to \$350 per month paid to railroad employees. These taxes are deposited in the railroad retirement account (trust fund) and are invested in Government securities bearing interest of at least 3 percent. Transfers are made between this account and the Federal old-age and survivors insurance trust fund and the Federal disability insurance trust fund so as to place these funds in the same position in which they would have been if railroad employment had been included in social security coverage. Funds required for the administrative expenses of the railroad retirement system are derived from the railroad retirement account in amounts specifically authorized by Congress.

The board requests an appropriation of \$9,460,000, to be derived from the railroad retirement account (trust fund), to cover the administrative expenses of the railroad retirement system for fiscal year 1960. Since this is a request for a transfer of funds from one trust account to another and not an appropriation of general Funds of the Treasury, it has no effect on the total amounts appropriated as reflected in the Federal budget.

The 1960 appropriation request of \$9,460,000 is \$1,010,000 more than the 1959 regular appropriation of \$8,450,000. However, the House and the Senate Appropriation Committees have cleared a supplemental appropriation of \$924,300 for 1959 to cover salary and postal rate increases and to provide for workloads created by amendments to the Social Security Act, making a total of \$9,374,300 to be available in 1959. Thus, the 1960 request of \$9,460,000 represents an increase of \$85,700 from total appropriation requirements of \$9,374,300 for 1959. The increase of \$85,700 in 1960 represents the net of several cost increases partially offset by savings resulting from a planned increase of 2 percent in productivity. The cost increases in 1960 include the cost of an additional com-

pensable day in 1960, the nonrecurring installation costs of an electronic system which will ultimately produce large savings, and the cost of handling increases in regular workloads.

The carefully limited 1960 estimate reflects the Board's continuing efforts to conserve the trust funds it administers by giving emphasis to the attainment of optimum efficiency and economy in its operations and still provide the service to which the railroad workers and their families are entitled. In this respect, it should be noted that administrative costs will represent less than 1.2 cents out of each dollar spent under the railroad retirement system in 1960.

AMOUNT REQUESTED

Mr. HABERMEYER. We are requesting about the same amount of money for operation next year as we received for operations this year. That is including the supplemental which is in the mill at the present time.

The request that we are making is for about \$85,000 more. That is caused by some additional costs we expect to incur in installing an electronic machine in our operations.

Senator HILL. Will the machines make much savings to the Government?

Mr. HABERMEYER. We expect they will make considerable savings in the administration of our law.

Senator HILL. How much are you putting into those machines, Mr. Chairman?

Mr. HABERMEYER. Mr. Rudisin.

Mr. RUDISIN. We are going to spend about \$115,000 from this appropriation for the nonrecurring conversion costs of the electronic data processing system.

Mr. HABERMEYER. We anticipate after it is installed we will have a minimum savings of \$150,000 a year.

DECREASE IN NUMBER OF CLAIMS

We hope to make some decrease in the number of claims on hand, but there were amendments to the Social Security Act last year which, of course, affected us. We have made a substantial number of the adjustments called for by that legislation.

There will be some that will carry on over into the next fiscal year. We were not able to get quite as much of the disability freeze work completed.

Senator HILL. Why did you not complete that work?

Mr. HABERMEYER. It just got involved in a lot more detail wherein we had to get more medical evidence from employees than we had anticipated. It is a rather peculiar operation in that it requires doctors which are hard to recruit on the outside, so we had to do with the force on hand.

It is a job that will probably not last more than another year. It is hard to get people to come in on a temporary basis.

It is not really affecting beneficiaries in that we are handling the cases where the beneficiaries might be affected immediately first. Those cases where the beneficiary's survivors might be entitled to larger amounts on the death of the annuitants, they are being handled last so that no one is being hurt or adversely affected at the moment.

Senator HILL. Of course, the House has passed one version of the bill, and the Senate has passed another version of the bill. If that passes, will that add to your burden?

Mr. HABERMEYER. Yes; it will add considerably, Mr. Chairman. We have not figured yet what the administrative costs will be, but there will be additional administrative costs.

Senator HILL. In other words, you will have to come back for a supplemental?

Mr. HABERMEYER. Yes, sir.

Senator HILL. With the funds as recommended by the budget for this next fiscal year, not considering this new legislation, do you think you will be all right?

Mr. HABERMEYER. I think so.

Senator HILL. And you can carry on without undue delays in adjusting claims?

Mr. HABERMEYER. I think we will be all right. We will be able to take care of our situation.

HOUSE ALLOWANCE

Senator HILL. I notice the House subcommittee allowed you the budget estimate.

Mr. HABERMEYER. I just found that out this morning.

Senator HILL. That was good news, was it?

Mr. HABERMEYER. Yes, sir.

Senator HILL. You are asking us not to cut it; is that right?

Mr. HABERMEYER. That is right.

Senator HILL. Thank you, gentlemen, very much for coming.

Mr. HABERMEYER. Thank you, Mr. Chairman.

Senator HILL. Now, the Federal Mediation and Conciliation Board.

FEDERAL MEDIATION AND CONCILIATION SERVICE

STATEMENT OF JOSEPH F. FINNEGAN, DIRECTOR, ACCOMPANIED
BY ROBERT H. MOORE, DEPUTY DIRECTOR; WALTER A. MAGGILO,
DIRECTOR OF MEDIATION ACTIVITY; L. E. EADY, DIRECTOR OF
ADMINISTRATIVE MANAGEMENT; AND JAMES J. DINNENY,
ASSOCIATE DIRECTOR, ADMINISTRATIVE MANAGEMENT

APPROPRIATION ESTIMATE

"For expenses necessary for the Service to carry out the functions vested in it by the Labor-Management Relations Act, 1947 (29 U.S.C. 171-180, 182), including expenses of the Labor-Management Panel as provided in section 205 of said Act; expenses of boards of inquiry appointed by the President pursuant to section 206 of said Act; temporary employment of arbitrators, conciliators, and mediators on labor relations at rates not in excess of \$75 per diem; and Government-listed telephones in private residences and private apartments for official use in cities where mediators are officially stationed, but no Federal Mediation and Conciliation Service office is maintained; [expenses of attendance at meetings concerned with labor and industrial relations; \$3,650,000] \$3,949,000."

Program and financing

	1958 actual	1959 estimate	1960 estimate
Program by activities:			
1. Mediation and conciliation of labor disputes.....	\$3,335,640	\$3,580,725	\$3,580,725
2. Presidential boards of inquiry.....	670	5,000	5,000
3. Administration.....	338,040	363,275	363,275
4. 1959 program obligated in 1958.....	23,150	-23,150	
Total obligations.....	3,697,500	3,925,850	3,949,000
Financing: 1959 appropriation available in 1958.....	-23,150	23,150	
New obligational authority.....	3,674,350	3,949,000	3,949,000
New obligational authority:			
Appropriation.....	3,674,350	3,650,000	3,949,000
Proposed supplemental due to pay increases.....		299,000	

Object classification

	1958 actual	1959 estimate	1960 estimate
Total number of permanent positions.....	346	344	352
Full-time equivalent of all other positions.....	5	6	4
Average number of all employees.....	338	348	351
Number of employees at end of year.....	339	344	349
Average GS grade and salary.....	10.5 \$8,099	10.6 \$9,025	10.5 \$9,016
01 Personal services:			
Permanent positions.....	\$2,835,647	\$3,112,250	\$3,136,800
Positions other than permanent.....	30,801	34,200	27,200
Other personal services.....	13,843	14,900	26,800
Total personal services.....	2,880,291	3,161,350	3,190,800
02 Travel.....	333,012	340,000	346,500
03 Transportation of things.....	10,109	8,500	9,000
04 Communication services.....	105,184	106,500	112,500
05 Rents and utility services.....	31,773	24,500	1,000
06 Printing and reproduction.....	9,344	7,500	7,500
07 Other contractual services.....	18,419	19,600	19,100
Services performed by other agencies.....	35,268	19,700	19,400
08 Supplies and materials.....	15,926	14,050	14,000
09 Equipment.....	50,530	42,800	22,700
11 Grants, subsidies, and contributions.....	182,727	202,100	204,000
13 Refunds, awards, and indemnities.....	1,355	2,000	2,000
15 Taxes and assessments.....	412	400	500
1959 program obligated in 1958.....	23,150	-23,150	
Total obligations.....	3,697,500	3,925,850	3,949,000

HOUSE REPORT

Senator HILL. The House report comments as follows:

The Federal Mediation and Conciliation Service, salaries and expenses. The bill includes \$3,905,400, a reduction of \$43,600 from the request, and \$26,800 more than the appropriation for 1959. The reduction recommended is equal to the nonrecurring expenses for rents and equipment which occurred in the current fiscal year.

Mr. FINNEGAN. I think the cut which the subcommittee recommended of about \$43,600 would be taking it right off the bone. It is not fat.

Senator HILL. You had better make a good statement here why you feel that way about it, Mr. Finnegan.

Mr. FINNEGAN. I will attempt to do so. I have not prepared any formal submission. I thought I would talk off the cuff and try to give you a picture of why I think that this year, above all years, our appropriation should be left intact.

COMPARISON OF 1958 AND 1959 WORKLOADS

From July 1958 through April 1959, we have had 1,401 strikes against about 1,000 for the comparable period of the previous year, and about a thousand for the comparable period before that.

During the period from July 1958 through April 1959 these 1,400 strikes involved 1,359,000 people as against 483,000 people for the comparable period of last year.

Senator HILL. Over twice as many.

Mr. FINNEGAN. Over twice as many.

So far in the first 9 months of this fiscal year, we have handled as many cases as we handled in our entire previous fiscal year.

Senator HILL. You mean up to now, this fiscal year, you have had as many cases as you did altogether in fiscal year 1958?

Mr. FINNEGAN. That is right.

Also, at the present time, from July 1, 1958, to March 1959, we closed out a total of over 4,900 cases, 786 more cases than the comparable 9 months in the previous fiscal year.

Those are finished mediation cases.

PENDING CASES

In our pending cases, we have pending as of March, 4,100 cases, against 2,600 for that same time as of last year.

In other words, an increase of about 52.8 percent.

I would like to talk to you a bit about the detail of this situation; why it came about.

During the late depression or recession, whatever term one wants to apply to it, a lot of employers learned that you make money not necessarily by sales. Sometimes if you can't make it by sales, you make it by effecting economies. They attempted to squeeze out of their operations a lot of water which had crept in in good times and which they could then tolerate.

As things are picking up, there has been quite an improvement in the economy, the unions are trying to get their bite. The unions are trying to get the increases which they had to forego last year, not

through any feeling of philanthropy, but because of the economics of the situation.

The employers on the other hand are trying to hold on to the gains they made in economies, automation, plant layout, and so forth, during the period when they had to make their profit out of expense saving rather than increased sales.

WORK STOPPAGES, 1959

Let's have a brief look at some of the stoppages that have occurred thus far in fiscal 1959, and we have 2 months still to go.

Take the Pittsburgh Plate Glass strike which lasted 18 weeks. We had 3 mediators on it, 55 mediation sessions.

Excello Products; the strike lasted 18 weeks, 23 mediation sessions.

Petroleum industry negotiations which were led off by Sinclair where 10,000 employees were involved. We had 2 commissioners assigned to the Sinclair case and 13 mediation sessions.

Twenty-two other mediators worked with the balance of the petroleum industry covering over 600 local contracts and more than 100,000 workers at the local level.

Undoubtedly you are familiar with the recent newspaper strike of last December in New York City, resulting in a 19-day printed news blackout, affecting 20,000 employees and total daily circulation of 51½ million and Sunday circulation of 8 million.

The New York Times published an estimated cost of the strike for the industry of \$50 million.

Reynolds Metals Co. has a plant in Sheffield, Ala., three in Louisville, Ky. There was an unauthorized stoppage there involving the intervention of our mediators who were successful in getting the thing worked out.

Senator HILL. How long did that strike last?

Mr. FINNEGAN. About 2 or 3 days. It was on a grievance, an unauthorized work stoppage. We were able to finally get the union to avail itself of the grievance machinery.

We had a 39-day strike in the trucking industry on the west coast.

We had 3 commissioners who met with the parties 30 times.

Now, what is the picture coming up?

Senator HILL. What about the future, this next year?

POSSIBLE FUTURE STOPPAGES

Mr. FINNEGAN. That is what I am coming to now, Mr. Chairman. That was the past.

Trends in labor relations do not follow any fiscal year boundaries. In the steel industry we have between a half and three-quarters of a million employees. That contract ends on July 1, as you know.

We have the aircraft industry contract coming up in September involving a quarter of a million people; the maritime negotiations coming up in September, involving the entire east and west coast, as well as the gulf. This time they are coterminus.

Senator HILL. It involves all of our maritime industry?

Mr. FINNEGAN. That is right.

Senator HILL. How many people will be involved?

Mr. FINNEGAN. About 45,000 directly. Indirectly you will have many times that number.

Three years ago we had a Taft-Hartley injunction in that case. Bob Moore chaired a mediation panel. He went up for a day or two or a week; he came back 3 months later.

We also have coming up the General Electric negotiations in September involving 83,000 employees and the Westinghouse Electric negotiation, involving 55,000.

So you have about a million and a half people, better than that, directly involved in labor contracts that will be up before September of this year.

I have left out meatpacking, which involves 60,000, which comes up in August and the aluminum industry which comes up in July, which is tied into the steel negotiations of course. The aluminum industry involves directly 45,000, but again many times that number indirectly to suppliers and the peripheral effects of a stoppage.

EFFECTS OF CUT IN REQUESTED FUNDS

So I think any attempt at this time to cut the mediation appropriation would be penny wise and pound foolish because in one day's stoppage alone, in any of these industries, many times our budget would be lost to the Government in taxes, to say nothing of the effect on the economy as a whole.

When we prepared this budget, Senator Hill, we cut it right down to the nub. We had taken a very substantial slicing in the Bureau of the Budget. We took a cut of \$281,000 from the Bureau of the Budget.

FACTS OF BUDGET

Our total requested appropriation now is \$70,000 in excess of what it was last year, largely a question of salary increases over which we have no control.

Senator HILL. What amount is attributed to salary increases?

Mr. EADY. That entire amount.

Senator HILL. If you got this cut of \$43,600 you would be sliced under what you had this year?

Mr. EADY. That is right.

As a result of the reduction by the Bureau of the Budget we purposely tried to protect or retain the mediator staff. We could not take a reduction in that category. So we applied the reductions to the two which you have mentioned, rental cost, and equipment cost. We accepted cuts in those categories in order to retain our mediator personnel.

Senator HILL. Those cuts were made by the Budget?

Mr. EADY. Made by the agency as a result of the Budget Bureau determination on total amount.

Senator HILL. They are reflected in the budget estimate; is that right?

Mr. EADY. Yes, sir.

PERSONNEL INCREASE

Senator HILL. Your budget this year does not provide for any additional personnel.

Mr. EADY. There is an increase of eight positions.

Senator HILL. Where would they be?

Mr. EADY. Two would be mediator positions and the remaining six would be clerical and administrative positions.

Senator HILL. Yes.

Mr. FINNEGAN. That addition in the clerical or administrative staff, Senator Hill, probably needs a little comment. With this increase of 52.8 percent in our pending cases, it means just that much more paper to be typed, filed, handled, and processed. It is a papermill operation when you get an increase of that proportion.

When I came down here in 1955 the Service had 231 mediators. We now have a basic staff of 210.

Actually, we are at the present time down to 201 because we have been trying to pull in our horns.

ABSORPTION OF PRIOR PERSONNEL CUTS

While we accepted the cut in rental allowance and so forth, a large part of the reason why we were able to absorb the personnel cut is because we could consolidate field positions, put the mediators in offices instead of working out of their homes where they operated before.

The result is that a man can handle two meetings a day instead of one and by bringing the parties into his office instead of having to travel 100 or 200 miles to handle a case.

A large part of our personnel economies have come from spending more money on rent.

I would rather have a small agency that can really operate efficiently and tightly and keep it at a maximum efficiency as it were, than to have mediators sitting around like firemen waiting to put out fires.

We cannot stockpile our business. We have to give a case attention when it pops up.

I think Mr. Eady wanted to say something about the supplemental pay allowance.

Senator HILL. All right, sir.

SUPPLEMENTAL ALLOWANCES

Mr. EADY. The estimate for the 1959 supplemental allowance was \$299,000 when it was originally prepared. We later agreed to absorb \$45,000 of that amount.

The House cut of 10 percent amounted to another \$25,000. Actually those reductions from expenditures which would normally be made this year equal the difference in appropriations for 1959 and 1960.

Senator HILL. These additional eight people you contemplate putting on, what is the cost of those eight people?

Mr. EADY. \$39,000 the first year.

In applying the 1960 appropriation \$43,000, in addition to new positions, we would be prevented from filling mediator position vacancies which we now have. Positions would necessarily have to be kept vacant in order to absorb the cut.

Senator HILL. You feel that you very much need these people in these vacancies, these additional people?

Mr. FINNEGAN. It seems to me that in view of this trend what has been in evidence since last July, and which has continued right up to

the present time, it will be critical if we don't get these additional people.

I state unequivocally that we will not be able to perform our mission with a cut of the size that the House subcommittee proposes. I am very definitely of that opinion.

Senator HILL. Have you any comment to make?

Mr. MOORE. Yes, Senator Hill, could I express it this way:

WORKLOAD INCREASE ABOVE EXPECTATION

At the time the budget was originally prepared we had gone through about 4 or 5 years of relatively level workload statistics. We had no reason to expect what has actually happened; namely, an unprecedented increase in immediate, necessary mediation work.

As Mr. Finnegan mentioned, since he came into office he has intentionally and deliberately reduced our staff at the same time trying to increase its efficiency. I think he has done a grand job.

If we are going to effectively handle for the Government the mediation work that is now on the books, which we know we can't avoid, we are going to have to have the added mediators, but not going back up to the 231 mediator staff that existed when he came in.

Now, this is a different problem than we knew when the budget was being prepared. The \$43,600 cut perhaps considered on the basis of a budget presentation of something more than a year ago, might be logical. Right now we are confronted with a manpower problem.

As Mr. Eady mentioned, part of the reason we were able to absorb the cost of the pay increase was that we did not fill these mediators' positions when they became vacant. We were hoping to be able to handle this load without them.

If we could have gotten by, we would have further reduced the staff.

Actually, we should increase our mediator staff to give people the kind of service they should get.

LENGTH OF MEDIATION PERIODS

One fact Mr. Finnegan did not mention. Even though you might discount the total statistics of our casework, the extreme amount of time we are now finding is required to settle disputes on the books today. You may be familiar, with West Virginia Paper and Pulp strike outside of Albany, dragging on for weeks.

Brown Instrument strike, in Philadelphia, that is critical to some of the defense effort. That has been dragging on 4 weeks.

These are day-after-day-after-day meetings unlike those we formerly mentioned, such as the Sheffield strike of 2 days. Here now we have strikes that run on and on and on.

The problems are different. In the oil strike, we had 24 mediators tied up at one time. These create serious manpower problems, problems we did not really know were going to exist at the time we prepared this budget and a problem you cannot answer by saying \$43,600 represents rent.

UNECONOMICAL NATURE OF CLERICAL FUNDS CUT

This money taken away from us now means a shortage of mediators necessary to do our job, and the necessary clerical people. You see, when we move a mediator into an office, if we get as many as three together, we like to have a secretary there. We have a \$10,000 or \$11,000 mediator instead of a girl pounding a typewriter.

It seems silly to have mediators in the office where they have to spend time typing reports. This is part of the clerical problem.

I don't think we can overemphasize, sir, the critical importance to the agency of not suffering a loss in our manpower ability to do our job.

Mr. FINNEGAN. Sometimes I get a little bit disillusioned here. It makes one a bit cynical. If you play the game and put in a tight budget, then they always assume you have some fat and you get cut.

The moral is, I suppose, don't level with the committee. Leave in plenty of fat.

I want to make part of the record, Senator Hill, the statistics to which I referred earlier.

Senator HILL. All right, we will put these tables in the record.

Mr. FINNEGAN. Thank you, Senator.

(The tables referred to follow:)

Comparison of pending mediation assignments

Period	Region							National total	Difference
	1	2	3	4	5	6	7		
Mar. 31, 1959----	956	377	256	518	732	591	690	4, 120	From 1958 to 1959, a numerical increase of 1,424 cases; and a percentage increase of 52.8.
Mar. 31, 1958----	532	245	196	347	468	370	538	2, 696	

MEDIATION CASES CLOSED

From July 1, 1958, through March 31, 1959, a total of 4,990 formal cases had been closed—786 more than for the same 9 months in the previous year.

From July 1, 1958, through March 31, 1959, a total of 8,860 informal cases had been closed—3,138 more than for the same 9 months in the previous year.

Total formal cases closed July 1, 1957, to March 31, 1958-----	4, 204
Total formal cases closed July 1, 1958, to March 31, 1959-----	4, 990
Total informal cases closed July 1, 1957, to March 31, 1958-----	5, 722
Total informal cases closed July 1, 1958, to March 31, 1959-----	8, 860

The number of cases already closed in the period cited, a figure impressive in itself, is made more indicative of a substantial workload rise by the number of cases pending, or still in the process of mediation on March 31, 1959. The fact that case closings in the past 9 months have been greater by nearly 800 cases, plus the abnormally large pending load, points to increasing use of mediation facilities.

Work stoppages to which FMCS assigned

Period	Strikes	Number involved
July 1954 through April 1955-----	859	685, 504
July 1955 through April 1956-----	1, 228	821, 767
July 1956 through April 1957-----	1, 014	1, 159, 132
July 1957 through April 1958-----	1, 074	483, 427
July 1958 through April 1959-----	¹ 1, 401	¹ 1, 359, 332

¹ Estimated figure for last 4 days of April 1959.

(The following letter was later received:)

FEDERAL MEDIATION AND CONCILIATION SERVICE,
Washington, D.C., May 1, 1959.

HON. LISTER HILL,
Chairman, Labor, Health, Education, and Welfare Subcommittee of the Senate Committee on Appropriations, U.S. Senate, Washington, D.C.

DEAR SENATOR HILL: In the course of the appropriation hearing which was conducted on April 28, I was informed of the action taken by the House committee in reducing our fiscal year 1960 request in the amount of \$43,600. I endeavored at that time to explain in general terms the effect which this reduction would have on our operations next year. I would like to present for the committee's consideration additional data which will substantiate the information previously provided.

The House committee report explains that the reduction is due to an apparent lesser need for funds in 1960 to defray the expense of office rentals and equipment purchases. Although our request to the Congress does, in fact, propose a lower rate of expenditure in these categories, it is not because of diminishing need but because there is not other area where a prior Budget Bureau cut can be applied without more serious detriment to the Service.

Our original budget submission did not propose a lesser amount in the cost of space and equipment. However, the Budget Bureau reduction of \$281,000 made it necessary to reduce these items in order to limit the total amount of appropriation. It was explained to us generally that the purpose of the reduction was to limit the total appropriation as a step toward a balanced budget. Accordingly we reduced items where the need is least critical. The only alternative was to accept a reduction in mediator personnel. This we knew would be not only impractical but sheer folly in the light of increased workload which was apparent at the time the reduction was applied and has since been further substantiated. It is more important to maintain an adequate staff to handle labor-management disputes than to spend funds for rentals and equipment. If we must absorb an additional cut of \$43,600, it will mean the loss of five mediator positions when they are most needed.

As you will note from the material which was presented to you during the hearing, our work volume has materially increased. On March 31, the number of disputes which were currently assigned to our mediators totaled 4,120, an increase of 52.8 percent over last year and an average current workload of 20.5 dispute cases per mediator. The total workload at that date was higher than at any period in the past 5 years.

Since becoming Director of the Service, I have consistently reduced the size of the staff, from 231 to the present proposal of 210, a reduction of 13 percent. Meanwhile, the caseload has increased by 23 percent and promises to continue mounting. As you will note from the attached chart prepared by the editors of Business Week magazine, the months ahead hold no promise of diminishing work for the Service.

On April 13, I informed you that the Service would not request restoration by the Senate of the 10 percent House reduction in supplemental funds for fiscal year 1959. A copy of my April 13 letter is attached. You will note that I also stated that a similar reduction could not be made in our 1960 budget.

I cannot stress too forcibly the importance of restoration of the \$43,600 amount. It represents a genuine need to enable us to give a satisfactory measure of assistance to parties in labor-management disputes.

Respectfully yours,

JOSEPH F. FINNEGAN, *Director.*

APRIL 13, 1959.

HON. LISTER HILL,
Chairman, Labor, Health, Education, and Welfare Subcommittee of the Senate Committee on Appropriations, U.S. Senate, Washington, D.C.

DEAR SENATOR HILL: The Federal Mediation and Conciliation Service will not request restoration of the 10-percent House reduction in supplemental funds for fiscal year 1959.

Although the major portion of the reduced amount would have been used for constructive purposes in our operations this year, we will temporarily defer the filling of vacant positions and other commitments to permit absorption of the \$25,400 reduction. This does not imply that a similar reduction may be made

in our 1960 budget, as our projected level of work volume and financial requirements will necessitate the full amount which I have requested in my presentation to the House committee.

Sincerely,

JOSEPH F. FINNEGAN,
Director.

SUBMISSION OF ADDITIONAL STATEMENTS

Senator HILL. Is there anything else you would like to add, sir?

Mr. FINNEGAN. I think that about does it, Mr. Chairman.

Senator HILL. These hearings will not be printed for 2 or 3 weeks, at least. So if any other facts should come to your attention, or anything you would like to add, we will be glad to have you submit further statements for the record.

We are certainly very much obliged to you.

Mr. FINNEGAN. Thank you, Senator. It is always a pleasure to come before you.

Senator HILL. Gen. Wade H. Haislip, will you come forward?

UNITED STATES SOLDIERS' HOME

STATEMENT OF GEN. WADE H. HAISLIP, GOVERNOR, U.S. SOLDIERS' HOME

APPROPRIATION ESTIMATE

“LIMITATION ON OPERATION AND MAINTENANCE AND CAPITAL OUTLAY

“For maintenance and operation of the United States Soldiers' Home, to be paid from the Soldiers' Home permanent fund **[\$5,299,500]** *\$10,948,000*, of which **[\$434,630]** *\$5,587,000* shall remain available until **[June 30, 1960]** *expended*, for construction of buildings and facilities, including plans and specifications: *Provided*, That this appropriation shall not be available for the payment of hospitalization of members of the Home in United States Army hospitals at rates in excess of those prescribed by the Secretary of the Army, upon the recommendation of the Board of Commissioners of the Home and the Surgeon General of the Army.

“**[**The amount authorized by the Department of Labor, and Health, Education, and Welfare Appropriation Act, 1959, to be paid from the Soldiers' Home permanent fund, for maintenance and operation of the Home, is increased by \$232,000, of which \$125,000 shall remain available until June 30, 1960, for construction planning.**]**”

Program and financing

	1958 actual	1959 estimate	1960 estimate
Program by activities:			
1. Medical care.....	\$2, 110, 112	\$2, 303, 006	\$2, 422, 518
2. Domiciliary activities.....	1, 120, 699	1, 248, 726	1, 262, 845
3. Administrative and central services.....	1, 550, 729	1, 617, 138	1, 675, 637
4. Permanent improvements.....	1, 818, 385	446, 922	5, 692, 621
Total obligations.....	6, 599, 925	5, 615, 792	11, 053, 621
Financing:			
Unobligated balance brought forward.....	2, 317, 298	534, 373	647, 081
Receipts transferred from Soldiers' Home permanent fund:			
Authorized.....	4, 817, 000	5, 531, 500	10, 948, 000
Proposed increase due to pay increases.....		197, 000	
Unobligated balance carried forward.....	— 534, 373	— 647, 081	— 541, 460
Total financing.....	6, 599, 925	5, 615, 792	11, 053, 621

Object classification

	1958 actual	1959 estimate	1960 estimate
U.S. SOLDIERS' HOME			
Total number of permanent positions.....	1,012	1,000	1,023
Full-time equivalent of all other positions.....	10	11	11
Average number of all employees.....	976	984	1,005
Number of employees at end of year.....	1,031	1,033	1,052
Average GS grade and salary.....	3.6 \$3,880	3.6 \$4,100	3.5 \$4,075
Average salary of ungraded positions.....	\$2,785	\$2,790	\$2,775
01 Personal services:			
Permanent positions.....	\$3,122,191	\$3,348,449	\$3,409,942
Positions other than permanent.....	52,254	57,526	57,526
Other personal services.....	91,998	98,275	113,532
Total personal services.....	3,266,443	3,504,250	3,581,000
02 Travel.....	771	565	565
03 Transportation of things.....	1,040	500	500
04 Communication services.....	13,775	13,610	13,610
05 Rents and utility services.....	84,402	84,360	88,510
06 Printing and reproduction.....	3,498	3,650	3,650
07 Other contractual services.....	414,743	429,444	485,378
08 Supplies and materials.....	894,221	997,139	1,045,092
09 Equipment.....	71,634	122,070	70,195
10 Lands and structures.....	62,188	54,402	93,456
11 Grants, subsidies, and contributions.....	173,561	197,802	207,800
15 Taxes and assessments.....	1,376	800	1,500
Subtotal.....	4,987,652	4,408,592	5,591,256
Deduct quarters, subsistence, and laundry.....	142,262	136,800	136,800
Total, U.S. Soldiers' Home.....	4,845,390	5,271,792	5,454,456
ALLOCATION TO CORPS OF ENGINEERS, ARMY			
Total number of permanent positions.....	2	10	7
Average number of all employees.....	2	10	7
Number of employees at end of year.....	1	10	7
Average GS grade and salary.....	7.4 \$5,552	7.3 \$6,129	7.3 \$6,155
Average salary of ungraded positions.....	\$5,026	\$5,166	\$5,202
01 Personal services:			
Permanent positions.....	\$13,224	\$71,200	\$51,400
Other personal services.....	51	1,100	900
Total personal services.....	13,275	72,300	52,300
07 Other contractual services.....	29,351	131,100	167,700
08 Supplies and materials.....	86		
10 Lands and structures.....	1,710,960	136,000	5,375,765
11 Grants, subsidies, and contributions.....	863	4,600	3,400
Total, Corps of Engineers, Army.....	1,754,535	344,000	5,599,165
Total obligations.....	6,599,925	5,615,792	11,053,621

SOLDIERS' HOME PERMANENT FUND*Amounts available for transfer*

	1958 actual	1959 estimate	1960 estimate
Unappropriated balances brought forward.....	\$77,542,988	\$85,765,890	\$93,037,390
Receipts:			
Stoppages, fines, and forfeitures.....	3,510,330	8,400,000	8,400,000
Estates of deceased soldiers and airmen.....	475,300	480,000	480,000
Withheld pay.....	1,622,885	1,515,000	1,515,000
Interest credited.....	2,422,610	2,600,000	2,900,000
All other.....	36,108	36,000	36,000
Unobligated balance returned.....	3,779		
Total available.....	90,614,000	98,796,890	106,368,390
Transferred to—			
“Limitation on operation and maintenance and capital outlay”:			
Authorized.....	—4,817,000	—5,531,500	—10,948,000
Proposed increases due to pay increases.....		—197,000	
“Payment of certified claims”.....	—31,110	—31,000	—31,000
Balance carried forward.....	85,765,890	98,037,390	95,389,390

PREPARED STATEMENT

Senator HILL. General, we will be delighted to have you proceed. We will put your full statement in the record at this point.

General Haislip. Thank you, sir.

(The statement referred to follows:)

As Governor of the U.S. Soldiers' Home, I take considerable pride in representing the home before this committee and I appreciate the opportunity of justifying the requirements as set forth in the budget now before you. As a preamble to my statement, I would like to remind the committee that while the home estimate appears in the President's budget, it is not included in the total.

PURPOSE OF ESTABLISHMENT

The conception of a home was apparently first brought up in Congress in 1829 and a report by the Committee on Military Affairs of the House of Representatives favored the establishment of such a home and stated that it was to be "without cost to the Government." In 1841, the matter was again reported on by the same committee which favored a "plan which imposes no additional burden on the community." Still again in 1845 and 1846 we find favorable reports, the one stating "without calling for the appropriation of a single dollar" and the other "that it does not ask any contributions of the Treasury of the Government."

Finally, the act of 1851 established the home for the relief and support of certain old, invalid or disabled soldiers of the Regular Army. In 1947, applicability of the laws governing the home was extended to include airmen. The establishment is devoted solely to the interests of the professional soldiers and airmen and recognizes and rewards their service both in peace and in war. The home is open to career soldiers and airmen only and benefits provided by other agencies do not overlap. It is not the mission of the home to rehabilitate members for return to civilian life, but to provide a home for them for the remainder of their lives.

ADMINISTRATION AND ADMISSION CRITERIA

The original act provided also for the government of the home and criteria for admission thereto. Although there have been minor statutory changes from time to time there has been no material change in the basic concepts envisioned by the original legislation in the ensuing 107 years. In fact, during that long period, the Soldiers' Home has become almost as much a part of the military system as the uniform. As recently as 1940, a report of a subcommittee of the Committee on Military Affairs of the Senate contained the following statement:

"Your committee are of the opinion that the whole legislative idea of the National Soldiers' Home was so well and so carefully worked out by our ancestors specifically in the acts of 1851 and 1883, that it is believed that even in the light of present day changes throughout the world it would be difficult indeed to improve upon the statutory provisions made for the comfort, care, and protection of the members."

As governor of the home, I report to a Board of Commissioners, established by the basic law, consisting of myself as the President of the Board, and six of the principal staff officers of the Army: The Surgeon General, the Chief of Engineers, the Chief of Finance, the Quartermaster General, the Judge Advocate General, and the Adjutant General. The basic legislation empowers this Board to establish regulations for the general and internal direction of the institution. These regulations must be submitted to the Secretary of the Army for approval.

MEMBERSHIP

Membership in the home is confined to former warrant officers and enlisted men who have had some service in the Regular Army or Air Force. In addition, membership is further limited to—

1. Those who have served honestly and faithfully 20 years or more; and
2. Those with a service-connected disability which renders them incapable of earning their own livelihood.

On April 13, 1959, the membership of the home was 2,045. Not all of these men occupied beds on the reservation. Some were on leave, at other hospitals,

or on outdoor relief and outside privileges. The Army and Air Force have shown a stimulated interest in the home and in the summer of 1956 a net increase in membership began which has developed into a persistent trend upward. The net gain in members in fiscal year 1958 was 166, and the financial effect of the predicted continuation of this increase will be elaborated upon in connection with my explanation of the budget request.

FINANCING

The act of 1851 provided that the home would be financed from a trust fund, and not from the general revenues of the Treasury. The Congress appropriates from this fund annually for the support of the home. This fund is built up from the following principal sources:

1. A monthly contribution of 10 cents made by each enlisted member of the Regular Army and Air Force;

2. Fines and forfeitures imposed upon soldiers and airmen of the Regular forces by sentence of courts martial; and

3. Interest of 3 percent per annum on the fund balance in the U.S. Treasury.

The permanent fund balance was \$84,480,929.74 as of April 13, 1959. It is gratifying to know that for many years to come, as in the past, the fund will be large enough to support the home and enable it to expand as necessary without becoming a burden on the taxpayer. There are today some 70,000 enlisted men who may be eligible for membership in the home. While only a small percentage may wish to enter the home this reserve provides a painless method of satisfying these requirements.

ANNUAL REPORT

The U.S. Soldiers' Home, in accordance with law, makes a report of its activities annually to Congress. Included in this document, which is transmitted to Congress, is a report by the Inspector General of the Army, who is required by law to make an annual inspection of the home and report the results to Congress. It is pertinent to quote an extract from his most recent report, dated November 25, 1958:

"II. SUMMARY OF OBSERVATIONS

* * * * *

"4. The appearance of the interior of the domiciliary buildings and the hospital was excellent. The appearance and police of the home grounds was considered to be generally excellent.

"5. It was evident that continuing progress on a well planned program had been made since the last inspection in the maintenance and renovation of the domiciliary and hospital buildings.

"6. It was noted that the U.S. Soldiers' Home had received the National Safety Council Award of Merit for having completed 1,329,953 man-hours of work without a disabling injury during the period June 26, 1957 to February 13, 1958, and, on November 17, 1958, received the Army Award of Merit for Safety for fiscal year 1958.

"7. Member participation in the recreation program of the home, including the hospital, appeared to be excellent. The directors of these programs were constantly alert to accommodate the changing desires of the members and to create an interest in new hobbies.

"8. The professional care of patients in the hospital was of the highest order and was in accordance with the best principles of medical standards. The reports of the Joint Commission on Accreditation of Hospitals were examined. Patient-doctor relationships were well established. Patient morale and confidence in the professional staff were worthy of note.

"9. The operation of the general mess in the Winfield Scott Building was worthy of commendation. Food preparation, service and sanitation were of the highest standards.

"10. It was noted that the staff and members of the home had participated wholeheartedly in the United Givers' Fund campaign in that the home had exceeded its monetary goal for contributions.

"11. The responsibilities of the secretary-treasurer were efficiently administered. The records and accounts were current and properly maintained (TAB C).

"12. The construction, repair and maintenance shops had only a 2-day backlog of work orders which was worthy of comment."

ANNUAL BUDGET

The Permanent Appropriations Repeal Act of of 1934 prescribed that the home would follow the same procedure in obtaining funds for operation as any other Government agency. Therefore, the home submits a budget through the same route, but the appropriations are made from the home trust fund.

JUSTIFICATION OF 1960 REQUEST

The fiscal year 1960 budget now before you is based on obligations for the fiscal year 1958 (actual); 1959 (estimated); and 1960 (estimated). The amounts shown include no-year funds carried forward from year to year for obligation. These carryover figures do not have any effect on the amount of new obligational authority being requested for appropriation.

In order to compare the funds requested for 1960 with the amount available in the current year, the no-year funds carried forward are removed, as follows:

	Fiscal year 1959	Fiscal year 1960
Obligations.....	\$5, 615, 792	\$11, 053, 621
Minus no-year funds carried forward.....	112, 708	105, 621
Appropriation.....	5, 728, 500	10, 948, 000

The budget now before you of \$10,948,000 is \$5,219,500 greater than funds for 1959, as follows:

	Fiscal year 1959	Fiscal year 1960	Increase
Maintenance and operation.....	\$5, 168, 870	\$5, 361, 000	\$192, 130
Capital outlay.....	559, 630	5, 587, 000	5, 027, 370
Appropriation.....	5, 728, 500	10, 948, 000	5, 219, 500

The amount requested for 1960 of \$5,587,000 for "Capital outlay," includes \$5,184,500 for final design and construction of a new 512-bed domiciliary building and \$402,500 for final design and expansion of one side of the Pipes ward wing to provide 70 additional beds. Preliminary planning funds for construction of the domiciliary building were included in the first supplemental, 1959.

Since the summer of 1956 there has been a persistent increase in the membership of the home and an overcrowded condition now exists in the domiciliary area. The number of domiciliary beds of acceptable standards is 1,445. Spaces on a temporary basis, not suitable for permanent occupancy, for 173 additional beds have been found by utilizing corridors, dayrooms, lobbies, and by exceeding the normal capacity of certain bedrooms. All of the permanent beds are now filled and emergency beds are being used.

In accordance with plans, the Sheridan Building, closed in 1954 after completion of the new 840-bed domiciliary building, was held in a standby condition to be used in the event overstrength occurred until such time as new construction could be completed. The 1959 appropriation provided for the rehabilitation of this 168-bed building to relieve the critical shortage of permanent beds. This building was opened on February 2, 1959. By careful planning the home has provided temporary accommodations for an overstrength of 341 members during the period of construction as requested in the budget now before you.

Based on the continued rate of increase in membership it is expected that the new domiciliary building will be needed by the end of fiscal year 1962. Therefore, it is imperative that funds be provided for this construction now. Funds for construction will provide for the erection of one-half of a new domiciliary building with a capacity of 512 beds. Funds for completing the building to a total of 905 beds will be requested as the demand for additional space becomes apparent.

Since hospital facilities must be expanded in direct ratio to the domiciliary load, funds are also requested for extending one side of the hospital ward wing (completed in 1954) to provide 70 additional beds. Expansion of the other side will be accomplished in conjunction with the completion of the final wings of the new domiciliary building.

There are currently 469 permanent hospital beds available and with space down middle aisles and in basements to establish 100 emergency beds, enough space is available for the 20 to 22 percent of the total members present ordinarily hospitalized until expansion of the hospital ward wing is complete.

The amount requested for "Maintenance and operation" for 1960 of \$5,361,000, is \$192,130 greater than the amount available for the current year. This net increase is due to the following additions and reductions:

(a) Provision for increased number of members and patients, including more employees, rations, supplies, equipment, dental and spectacle contract work, additional Sister nurses and greater payments into the retirement fund for additional employees-----	+\$103,375
(b) A planned program for painting buildings which runs in a 4-year cycle. The majority of buildings will have to be repainted in 1960 since the last major painting was done in 1956-----	+54,016
(c) Fiscal year 1960 is a leap year and provision for salaries, payment to other hospitals, and rations is made for the extra day-----	+18,265
(d) The daily rate to be paid to St. Elizabeths Hospital has been increased by the Bureau of the Budget from \$6.72 to \$7.17----	+8,392
(e) An increase of 2 cents per ration for patients and hospital employees and 1 cent per ration for members and domiciliary employees based on the actual value of the ration as recorded for 1958-----	+7,973
(f) Providing a safe level of inventory of hospital supplies. Based on additional amounts and costs of supplies issued during 1958, the sum included in the current year appropriation will provide approximately one-half of a safe level. This has made it necessary to request additional funds for hospital supplies for 1960-----	+23,320
(g) Request for 1 passenger car, 3 trucks, and 1 ambulance costing \$16,150 are offset by a reduction of \$23,645 for replacement of all other equipment-----	-7,495
(h) 2 large decreases are included; the 1 a drop in the price of fuel oil, \$8,019; the other a reduction in the amount of nonrecurring maintenance projects, \$12,509-----	-20,528
(i) Miscellaneous small increases and decreases amounting to a net increase of -----	+4,812

The net increase of \$192,130 represents a dollar increase over the amount available for the current year of approximately 4 percent. In view of the estimated 4-percent increase in total membership, the request is considered reasonable.

CONCLUSION

Let me assure the committee that those officials entrusted with the accomplishment of the mission of the home are continuing to do so efficiently and with prudence. I wish to thank you again for the opportunity of appearing here and at the same time convey to you the gratitude of the members of the home for the keen interest shown by the Congress.

INCREASE IN BUDGET REQUEST

General HAISLIP. If you permit, Mr. Chairman, I would like to go directly to the budget.

Senator HILL. All right, sir.

General HAISLIP. The budget now before you of \$10,948,000 is \$5,219,500 greater than the funds for 1959.

There is an increase for "Maintenance and operation" of \$192,130 and for "Capital outlay," an increase of \$5,027,370.

Senator HILL. General, that capital outlay is for what?

CAPITAL OUTLAY

General HAISLIP. That is for the purpose of building a 512-bed domiciliary building and enlarging one side of the Pipes ward wing to provide 70 additional hospital beds to meet the gradual and steady increase in membership that we have been having for the last 21½ years.

We are now in an emergency status. We have filled those lodgings which meet our standards and in addition, we are using basements and hallways and crowding in rooms to handle the overflow until we can get this new building.

We feel that we have enough emergency room now to handle the additional members who come in until the summer of 1962 when we must have this new building.

We propose eventually to complete the building to over 900 capacity, but I don't want to build the entire building now and have it half empty, for a long period.

So we are going to build the front and the two inner wings of the building for a capacity of 512 beds and then as the demand develops we add the outer two wings.

Senator HILL. You are constructing the building in such a way that the wings can be added without any difficulty and at a minimum cost.

General HAISLIP. That is right. We will have our complete plans for them under the funds which we are asking for now.

Senator HILL. In other words, you have the plan for the complete building although you propose to build only part of it at this time?

General HAISLIP. That is right, to meet the demand that we can see definitely.

As you know, you gave us funds last year to rehabilitate the Sheridan Building which had been standing by. That was opened in February and we are gradually filling it up now.

Does that satisfy you on the capital outlay, Senator?

Senator HILL. I think so. We have the picture. We gave you the planning money last year.

At that time you gave us a good picture of what the building would be, the needs of the building, and the necessity for its construction.

General HAISLIP. Yes, sir.

MAINTENANCE AND OPERATION

Now, the "Maintenance and operation" is \$192,130, greater than the amount available for the current year. This net increase is due to the following additions and reductions:

First, the provision for the increased number of members and patients including more employees, rations, supplies, equipment, dental and spectacle contract work, additional Sister nurses, and greater payments in the retirement fund for new employees.

That accounts for \$103,000 of the additional amount.

Our planned program of painting buildings runs in 4-year cycles, which means then, the repainting of a majority of the buildings in 1960, and that calls for an increase of \$54,000 plus.

Next year is leap year. We have to pay for the extra day. That will cause an additional \$18,000.

Senator HILL. That is that extra payday?

General Haislip. That is right; pay for an extra day.

The Bureau of the Budget has increased the rate we are to pay St. Elizabeths for the insane we have out there, which will cause an \$8,000-plus increase.

INCREASE FOR RATIONS AND SUPPLIES

Then we are asking for an increase of 2 cents per ration for patients and hospital employees and 1 cent per ration for members and domiciliary employees. That will cause an increase of almost \$8,000.

We want to provide a safe level of inventory of hospital supplies. We were cut last year below a safe level. We are trying to go back to a safe level. We are asking for an increase of \$23,000 in that category so that we can build up a sufficient level and to cover the considerable time it takes to get medicine and supplies delivered. We want them on hand.

NEED FOR VEHICLES

We are requesting one passenger car, three trucks, and one ambulance. We are offsetting that by a reduction of \$23,000 for replacement of other equipment. So that is a \$7,500 minus item.

Two large decreases are included, the one a drop in the price of fuel oil; the other, a reduction in the amount of nonrecurring maintenance projects which causes a reduction of \$20,500.

And there are miscellaneous small increases and decreases which amount to a net increase of \$4,800.

The net increase of \$192,130 represents a dollar increase over the amount available for the current year of approximately 4 percent. In view of the estimated 4-percent increase in total membership, the request is considered reasonable.

Senator HILL. We are very happy to have with us as a member of our committee, Senator Byrd of West Virginia.

You have been over this with us before, but you might briefly summarize how you finance your expenditures, General Haislip.

SUMMARY OF FINANCING EXPENDITURES

General Haislip. In the original act of 1851 which established the soldiers' home, the method of financing the operation of the home was set out in the law and with very few changes it is still in existence today. That law provides that there will be a contribution from every regular soldier and airman of 10 cents a month into the fund, that the fines and forfeitures from courts-martial of those same people will go into the fund, and that by law we have to deposit the fund in the Treasury and that agency pays us 3-percent interest on the fund balance.

By law the taxpayer does not pay for the home. The total of this budget is not added to the President's budget.

According to the Permanent Appropriation Repeal Act of 1934, we are required now to come to the Congress with a budget like anybody else and ask for the appropriation of funds to support us which comes out of our trust fund in the Treasury.

STATUS OF TRUST FUNDS

Senator HILL. These funds in your trust fund do not come out of the Treasury?

General HAISLIP. No, sir.

Senator HILL. They do not come out of the taxpayer. They come out by the ways you have described to us this morning?

General HAISLIP. That is right. They are not a part of the general funds of the Treasury. It is a trust fund.

I am sure the Treasury makes good use of the money, but they credit us on our books with the fund and they are held separately from the general funds of the Treasury.

Senator BYRD. What is the condition of the trust fund?

General HAISLIP. It is around \$85 million.

Against that there are well over 70,000 men today eligible for membership in the home who could come in.

Senator BYRD. How much is taken out of the pay of each serviceman?

General HAISLIP. Under the law not in excess of 25 cents a month, but the exact rate is set by the Secretary of the Army who has set 10 cents a month as the deduction.

QUALIFICATIONS FOR MEMBERSHIP IN HOME

Senator BYRD. Might I ask what the qualifications are for membership?

General HAISLIP. I have it right here.

Membership in the home is confined to former warrant officers and enlisted men who have had some service in the Regular Army or Air Force.

In addition, membership is further limited to, first, those who have served honestly and faithfully for 20 years or more; and, secondly, those with service-connected disability which renders them incapable of earning their own livelihood.

The home is for the career soldier. It rewards service both in peace and in war.

Senator BYRD. It is confined to enlisted men?

General HAISLIP. Not to officers. It is for the volunteer; the Regular soldier. The draftee goes to the Veterans' Administration as a wartime soldier.

Senator HILL. These are what in the old days were the soldiers of the Regular Army?

General HAISLIP. That is right. The professional soldier.

Senator HILL. They must have served at least 20 years or have a service-connected disability which renders them incapable of earning their own livelihood?

General HAISLIP. That is right.

PRESENT MEMBERSHIP

Thirteen hundred are retired with over 20 years' service and the remainder, 750, are men who are disabled and can't earn their livelihood.

They run in age from 26 to 96.

Senator BYRD. Do you have both colored and white soldiers in the home?

General Haislip. Yes, sir.

Senator HILL. Your full statement is in the record, General. Is there anything else you would like to add to your statement?

General Haislip. No, sir, except I appreciate very much coming before you, sir.

Senator HILL. As I have said, we are always happy to have you here.

HOUSE ALLOWANCE

General Haislip. I don't know what the House did with our bill.

Senator HILL. They allowed you the budget estimate.

Senator BYRD. I have another question.

FINES AND FORFEITURES

What about the fines and forfeitures imposed on draftees?

General Haislip. They go into the Treasury of the United States.

Senator BYRD. They do not go into this trust fund?

General Haislip. No, sir; this is solely for those men who are qualifying for admission to the home. They are limited to the career soldier, the volunteer.

Senator BYRD. Thank you, General.

Senator HILL. Is there anything else, General?

General Haislip. I don't think so.

Senator HILL. Thank you, we are certainly happy to have you here.

General Haislip. We are happy to be here and always look forward to coming up.

Senator HILL. Now, the Interstate Commission on the Potomac River Basin.

INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN
STATEMENT OF ELLIS S. TISDALE, DIRECTOR

APPROPRIATION ESTIMATE

"To enable the Secretary of the Treasury to pay in advance to the Interstate Commission on the Potomac River Basin the Federal contribution toward the expenses of the Commission during the current fiscal year in the administration of its business in the conservancy district established pursuant to the Act of July 11, 1940 (54 Stat. 748), \$5,000."

Program and financing

	1958 actual	1959 estimate	1960 estimate
Program by activities: Contribution to the Commission (total obligations)-----	\$5,000	\$5,000	\$5,000
Financing: Appropriation (new obligational authority)-----	5,000	5,000	5,000

Object classification

	1958 actual	1959 estimate	1960 estimate
Grants, subsidies, and contributions-----	\$5,000	\$5,000	\$5,000

GENERAL STATEMENT

Senator HILL. Mr. Tisdale, we are glad to have you here with us. Your statement will appear in full in the record at this point. (The statement referred to follows:)

I shall summarize what I have to say today with reference to the Interstate Commission briefly under three headings.

1. Recent publication entitled "Teamwork on the Potomac." Shows accomplishments since 1940.
 2. Joint Congressional Committee on Washington Metropolitan Problems; recommendations in hearings and staff reports.
 3. Consulting Engineer Abel Wolman's Report on Future Activities of the Interstate Commission on the Potomac River Basin and Revision of its Compact.
1. Our new publication "Teamwork on the Potomac" gives a pictorial summary of the work and accomplishments of the Interstate Commission on the Potomac River Basin over a period of 18 years. It is significant that substantial progress is being made not only in all the States through the efficient work of the several State water pollution control agencies, but also in the District of Columbia which is completing its \$14 million sewage treatment plant early in 1959. This will make for substantial improvement in water quality of the Potomac in the Washington metropolitan area.

Reference to "Teamwork on the Potomac" shows the serious sewage pollution as determined by the U.S. Public Health Service investigation in 1957. Standards for water quality which have been recommended to the several States for consideration and adoption are set forth. The work of this Commission has aided materially in the control of water pollution in the Washington metropolitan area.

2. The Joint Congressional Committee on Washington Metropolitan Problems staff reports refer to the Potomac River Commission favorably. On page 12 of the staff report on "Water Supply and Sewage Disposal," prepared for the Joint Committee on Washington Metropolitan Problems, are found several significant statements under the heading "Potomac River Commission." As follows:

"The role of the Interstate Commission on the Potomac River Basin was discussed by many of the witnesses. These persons, including planners, civic leaders, technical experts, and those representing recreation and conservation groups were unanimous in requesting that the Commission be strengthened and expanded. All felt that the educational and informational facilities of the Commission should be increased. The minimal budget of the Commission should be enlarged to permit the organization to fulfill its important role in promoting public interest and understanding of the water-use problems of the Potomac Basin."

3. Consulting Engineer Abel Wolman's report entitled "Future Activities of the Interstate Commission on the Potomac River Basin."

During 1958, the Commission retained an eminent consultant, Abel Wolman, of Baltimore, Md., to advise with respect to broadening the scope of its activities from water pollution alone to water conservation from all angles. This study was authorized by the Commission under the Compact Revision Study Committee, Mr. David V. Auld, chairman.

Mr. Wolman recommended that the Commission broaden its activities, remove the financial ceiling from the compact and while retaining the water pollution as the main basis for its operations, extend its scope to cover water resources conservation in the basin.

It is hoped that Congress and several of the State legislatures may consider an amended compact in 1959.

Enclosures:

"Teamwork on the Potomac."

Wolman Report on "Future Activities of the Interstate Commission on the Potomac River Basin."

Mr. TISDALE. Senator Hill, I am pleased to make a very brief statement concerning a small appropriation.

Senator HILL. \$5,000?

Mr. TISDALE. That is right, sir.

I thought it would be interesting to the group to summarize briefly what is going on in this Commission.

ACTIVITIES OF COMMISSION

I have brought copies of a publication entitled "Teamwork on the Potomac," which summarizes the activities of this Commission since 1950, since the four States in the basin and the District of Columbia and the Federal Government have agreed on working together to reduce water pollution.

In this publication we call attention to the fact that tremendous progress is being made in this metropolitan area. In this coming month of May the new \$14 million District of Columbia sewage treatment plant will be dedicated which takes care of all of the sewage from the Maryland suburbs, and Washington, D.C.

In working out this program this Commission has given a great deal of leadership in this metropolitan area improvement program. This publication sets up water quality standards which are set forth clearly, and we anticipate that we will be able to live up to these standards which have been recommended to the States and which we hope the States will agree to work to carry out.

HEARINGS BEFORE COMMISSION

The second thing I want to call to your attention is the fact that the Joint Congressional Committee on Washington Metropolitan Problems had extensive hearings this past year and among the significant things that come out concerning this Commission was the statement that outstanding civic leaders, planners, technical experts,

and conservation leaders, are unanimous that this Commission should be strengthened and expanded in order to deal not only with pollution control, sewage, and industrial waste, but with all aspects of water resources conservation.

REPORT OF CONSULTING ENGINEERS

Finally, the third thing that I want to call to your attention in the way of progress that is being made, is that through the Federal grant from the Public Health Service, we have been able to retain consulting engineers familiar with this basin. Our study committee on compact revision considering future activities and revision of this compact has negotiated with Mr. Abel Walman, of Baltimore, and a few months ago we received his report to the Commission which recommends that the Commission do two things:

First, remove the financial ceiling which has been on this Commission since we started in 1940, a ceiling of \$30,000 and, second, expand the scope of the operation of the Commission so that it can cooperate with all of the Federal agencies more effectively and all the State agencies in doing a comprehensive job of water conservation. I shall file this report with you.

SUMMARY OF WORK AND RECOMMENDATIONS

Briefly, I will summarize and say that we feel that good progress is being made in the Washington metropolitan area. The new District of Columbia sewage treatment plant which will go into operation next month, will greatly reduce the sewage pollution and bring this stream from a dead stream back into a live stream again in the metropolitan area.

The recommendation of the leaders in the water conservation field expressed the desire that the work of this Commission be expanded and this is being considered by the Commission. The report has been made by the consultant and we feel that a pattern for the future usefulness of the Commission has been set forth and we hope to bring before the Congress and the Legislatures of West Virginia, Maryland, Pennsylvania, Virginia, and the District of Columbia next year to expand the scope of the Commission.

Senator HILL. Are there any questions, Senator Byrd?

Senator BYRD. Nothing except I wish to commend the work of this Commission and state that I am interested in it and am very much in favor of extending the scope and in favor of the appropriation, Mr. Chairman.

Mr. TISDALE. I am very glad to hear the Senator say that because of my previous work for 20 years in West Virginia, and we are cooperating with the water conservation groups there, and we are fortunate to have an outstanding conservation leader, Carl Johnson, helping us on our staff with problems which involve land use, sound forestry practices and soil conservation.

We want to get all of these things together and do a good job and conserve the water assets of this basin in the future.

Senator BYRD. Carl Johnson is a very capable and experienced individual.

Mr. TISDALE. He is good on public relations. He understands all the Federal agencies and how to work effectively with the State agencies.

This is a job in which all of us have to pull together in teamwork. It is very encouraging.

Senator HILL. I am delighted that you are so encouraged. I think nothing makes for morale or esprit de corps as a little encouragement.

Mr. TISDALE. We get it here from you folks when we appear and we appreciate it.

Senator HILL. We are always glad to have you here. We appreciate your coming.

Mr. TISDALE. Thank you, Mr. Chairman.

COMMITTEE RECESS

Senator HILL. The committee will stand in recess now until 10 o'clock in the morning when the Secretary of Health, Education, and Welfare will appear.

(Thereupon, at 10:50 a.m., Tuesday, April 28, 1959, the subcommittee was recessed, to reconvene at 10 a.m., Wednesday, April 29, 1959).

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR 1960

WEDNESDAY, APRIL 29, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room F-82, the Capitol, Hon. Lister Hill (chairman of the subcommittee) presiding.

Present: Senators Hill and Chavez.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

APPEALS FROM HOUSE ACTION

Senator HILL. The committee will kindly come to order.

I have a letter here of April 29, today, from Secretary Flemming with reference to appeals from the different actions of the House. We will put that letter in the record at this point.

(The letter referred to follows:)

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, April 29, 1959.

HON. LISTER HILL,
Chairman, Subcommittee on Departments of Labor and Health, Education, and Welfare and Related Agencies, Committee on Appropriations, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The House, in passing H.R. 6769, made reductions in four items amounting to \$2,078,600, and made increases totaling \$183,446,000.

I have carefully reviewed each of the programs affected by the reductions and strongly recommend that the Senate restore funds in three of these appropriations for an increase of \$1,928,600 over the House allowance for these items, of which \$24,300 would be by transfer from trust funds. The major decrease made by the House was to delete entirely the appropriation for "Grants for social security training and studies" in the amount of \$1,785,000. In my opinion, this item is of a very high priority. The request is for two specific purposes: To increase the number of adequately trained State and local public welfare workers and to provide for conducting research and demonstration projects in problems relating to social security.

The estimate for the Federal share of public assistance grants for 1960 is over \$2 billion, and over 5.7 million people are expected to receive public assistance in that year. It is believed that if the funds requested for "Grants for social security training and studies" were appropriated we could deal more fully with the problems of people seeking welfare assistance both through the better application of existing knowledge and through the discovery of new and better ways of dealing with the problem of dependency and its causes. The means provided by these grants would better equip us to assist individuals to become self-sustaining to a much greater degree and, in many instances, to enable them to become contributors to community resources rather than recipients of community aid. In this way we could reduce over a period of time the enormous cost of assistance

programs to all levels of government. Therefore, I strongly urge that the Senate restore the funds requested for this item.

The one item for which restoration is not requested is the appropriation for construction of animal quarters at Hamilton, Mont., and an appeal is not being made in light of the overall fiscal situation.

The House allowed increases, however, in 23 appropriations primarily for construction and construction grants, medical research and programs of school assistance in federally affected areas. While these are quite desirable and despite my enthusiasm for the programs, I must call to the attention of your committee the serious fiscal implications of such increases. The President's budget is a carefully considered financial plan and the increases contained in this bill would unbalance the budget and would thus be clearly contrary to the fiscal policies and recommendations of the President.

There are other House actions relating to language provisions which I believe would be detrimental to the operations of this Department.

One concerns authorization for entertainment of foreign officials and scientists and scientists which the House did not approve. The provision of this authority would extend reciprocal hospitality to these foreign visitors and would also alleviate a hardship on some of our officials who now must meet such expenses from personal funds.

Another provision disapproved by the House which I feel should be restored is the extension to Public Health Service hospitals and to St. Elizabeths Hospital authority to apply for research grants from appropriations to the Public Health Service on the same basis as is applicable to non-Federal institutions. Such authority would strengthen the hospitals, improve patient care and utilize heretofore unused facilities and patients for effective research.

I am also requesting the insertion of legislative authority in the general provisions for attendance at meetings. Although the Department requested the deletion of the authority heretofore carried in the bill making salaries and expenses appropriations available for attendance at meetings relying on the authority contained under section 19 of the Government Employees Training Act, some question has since arisen as to whether this section would provide for all employees of the Department. Suitable language is incorporated in the attachment which would provide a single legislative authority for attendance at meetings by all officers and employees of the Department. It would likewise permit use of a single authority (5 U.S.C. 623f) within the Department for the acceptance of payments from non-Federal sources of travel and related expenses in connection with such attendance at meetings.

Each requested amendment is set forth in the attachment. If any further information is desired by you or the committee in connection with these amendments, we shall be happy to furnish it promptly.

Sincerely yours,

ARTHUR S. FLEMMING,
Secretary.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

(Amendments requested to H.R. 6769, 86th Congress, in the Senate of the United States)

FOOD AND DRUG ADMINISTRATION

SALARIES AND EXPENSES

1. Page 13, line 2, strike out "\$13,800,000" and insert in lieu thereof "\$11,800,000".

OFFICE OF EDUCATION

PROMOTION AND FURTHER DEVELOPMENT OF VOCATIONAL EDUCATION

2. Page 16, line 15, strike out "\$4,000,000" and insert in lieu thereof "\$2,900,000"; page 16, line 18, strike out "\$33,702,081" and insert in lieu thereof "\$32,602,081"; and page 16, line 21, strike out "\$30,367,081" and insert in lieu thereof "\$29,267,081".

GRANTS FOR LIBRARY SERVICES

3. Page 17, line 9, strike out "\$6,000,000" and insert in lieu thereof "\$5,150,000".

PAYMENTS TO SCHOOL DISTRICTS

4. Page 17, line 23, strike out "\$163,957,000" and insert in lieu thereof "\$142,300,000".

ASSISTANCE FOR SCHOOL CONSTRUCTION

5. Page 18, line 10, strike out "\$61,135,000" and insert in lieu thereof "\$38,500,000".

EXPANSION OF TEACHING IN EDUCATION OF THE MENTALLY RETARDED

6. Page 19, line 8, strike out the "period" and insert "; *Provided, That* section 2 of such Act is hereby amended by adding at the end thereof: 'Such grants shall also be available to assist such institutions in meeting the costs of training for such fellows and trainees'".

PUBLIC HEALTH SERVICE

CONTROL OF VENEREAL DISEASES

7. Page 23, line 3, strike out "\$5,400,000" and insert in lieu thereof "\$4,673,000".

SANITARY ENGINEERING ACTIVITIES

8. Page 24, line 14, strike out "\$14,590,000" and insert in lieu thereof "\$14,275,000".

GRANTS FOR WASTE TREATMENT WORKS CONSTRUCTION

9. Page 24, line 18, strike out "\$45,000,000" and insert in lieu thereof "\$20,000,000"; and page 24, lines 19 through 21 strike out ": *Provided, That* allotments under such section 6 for the current fiscal year shall be made on the basis of \$50,000,000".

GRANTS FOR HOSPITAL CONSTRUCTION

10. Page 24, line 24, strike out "\$143,700,000" and "\$121,500,000" and insert in lieu thereof "\$101,200,000" and "\$79,000,000".

INDIAN HEALTH ACTIVITIES

11. Page 27, line 8, strike out "\$45,500,000" and insert in lieu thereof "\$43,500,000".

CONSTRUCTION OF INDIAN HEALTH FACILITIES

12. Page 27, line 14, strike out "\$4,587,000" and insert in lieu thereof "\$3,087,000".

GENERAL RESEARCH AND SERVICES, NATIONAL INSTITUTES OF HEALTH

13. Page 28, line 4, strike out "\$36,404,000" and insert in lieu thereof "\$28,974,000".

NATIONAL CANCER INSTITUTE

14. Page 29, line 4, strike out "\$83,308,000" and insert in lieu thereof "\$75,218,000".

MENTAL HEALTH ACTIVITIES

15. Page 29, line 8, strike out "\$60,409,000" and insert in lieu thereof "\$52,384,000".

NATIONAL HEART INSTITUTE

16. Page 29, line 11, strike out "\$52,744,000" and insert in lieu thereof "\$45,594,000".

DENTAL HEALTH ACTIVITIES

17. Page 29, line 16, strike out "\$9,725,000" and insert in lieu thereof "\$7,420,000".

ARTHRITIS AND METABOLIC DISEASE ACTIVITIES

18. Page 29, line 20, strike out "\$37,790,000" and insert in lieu thereof "\$31,215,000".

ALLERGY AND INFECTIOUS DISEASE ACTIVITIES

19. Page 29, line 24, strike out "\$30,286,000" and insert in lieu thereof "\$24,071,000".

NEUROLOGY AND BLINDNESS ACTIVITIES

20. Page 30, line 5, strike out "\$33,613,000" and insert in lieu thereof "\$29,403,000".

GRANTS FOR CONSTRUCTION OF HEALTH RESEARCH FACILITIES

21. Page 30, line 10, strike out "\$30,000,000" and insert in lieu thereof "\$20,000,000".

SOCIAL SECURITY ADMINISTRATION

LIMITATION ON SALARIES AND EXPENSES, BUREAU OF OLD-AGE AND SURVIVORS INSURANCE

22. Page 32, line 18, after the colon insert "*Provided further*, That this authorization shall be available for research and development of electronic or automatic equipment by contract, which shall be coordinated with similar activities and requirements of other Government agencies: *Provided further*, That any such contract shall contain appropriate provisions to protect the interest of the Government and the public, including provisions relating to the disposition of rights in any inventions made or developed in the course of work under the contract:"

GRANTS TO STATES FOR MATERNAL AND CHILD WELFARE

23. Page 34, line 21, strike out "\$46,500,000" and "\$16,000,000" and insert "\$43,500,000" and "\$15,000,000"; line 22, strike out "\$17,500,000" and insert "\$16,500,000"; and line 23, strike out "\$13,000,000" and insert "\$12,000,000".

GRANTS FOR SOCIAL SECURITY TRAINING AND STUDIES

24. Page 35, after line 14, insert "Grants for Social Security Training and Studies: For grants to States for increasing the number of adequately trained public welfare personnel, pursuant to section 705 of the Social Security Act, as amended (42 U.S.C. 906), and for making grants, contracts, and jointly financed cooperative arrangements for research or demonstration projects pursuant to section 1110 of said Act, as amended (42 U.S.C. 1310), including necessary expenses of Federal administration, \$1,785,000, of which \$1,000,000 shall be grants under said section 705."

OFFICE OF THE SECRETARY

SALARIES AND EXPENSES

25. Page 36, line 16, strike out "\$2,061,000" and "\$302,500" and insert in lieu thereof "\$2,151,000" and "\$318,000".

OFFICE OF THE GENERAL COUNSEL

SALARIES AND EXPENSES

26. Page 37, line 4, strike out "\$589,700" and insert in lieu thereof "\$619,000"; line 7, strike out "\$510,200" and insert in lieu thereof "\$519,000".

GENERAL PROVISIONS

27. Page 39, after line 14 insert the following:

"SEC. 209. Not to exceed an aggregate of \$5,000 shall, when authorized by the Secretary, be available, from appropriations under this title available for sal-

aries and expenses, for entertainment of officials of and visiting scientists and other experts from other countries and of officials of international organizations, and the amount made available by this section shall be in lieu of any other amounts made available in this title for such purposes."

"SEC. 210. Appropriations to the Public Health Service available for research grants pursuant to the Public Health Service Act shall also be available, on the same terms and conditions as apply to non-Federal institutions, for research grants to hospitals of the Service or to Saint Elizabeths Hospital."

"SEC. 211. Appropriations under this title available for salaries and expenses shall be available for expenses of attendance at meetings which are concerned with the functions or activities for which the appropriation is made or which will contribute to improved conduct, supervision, or management of those functions or activities."

Senator HILL. The subcommittee has been supplied, upon its request, a table entitled "Comparison of operating agency requests, Department requests, and President's budget estimate, fiscal year 1960", showing the preliminary agency requests to the Department, the preliminary Department requests to the Bureau of the Budget, the final Department requests to the Bureau of the Budget, and, finally, the President's budget estimate. This table will be placed in the record at this point.

(The table referred to follows:)

Comparison of operating agency requests, Department requests, and President's budget estimate, fiscal year 1960

	Preliminary agency request to Department ¹		Preliminary Department request to Bureau of Budget		Final Department request to Bureau of Budget		President's budget	
	Positions	Amount	Positions	Amount	Positions	Amount	Positions	Amount
American Printing House for the Blind: Education of the blind.		\$400,000		\$400,000		\$400,000		
Food and Drug Administration:								
Salaries and expenses	1,672	2 14,888,000	1,660	13,958,000	1,615	13,158,000	1,447	11,800,000
Salaries and expenses, certification, inspection, and other services		(³)		(1,410,000)		(1,410,000)		(1,410,000)
Construction		21,200,000		21,200,000				
Freedmen's Hospital: Salaries and expenses	913	4,244,000	776	3,568,000	705	3,354,000	694	3,190,000
Gallaudet College:								
Salaries and expenses	193	873,000	196	932,000	196	932,000	190	892,000
Construction		2,357,000		2,292,000		2,292,000		150,000
Howard University:								
Salaries and expenses	1,052	5,455,000	1,024	4,850,000	1,024	4,850,000	992	4,617,000
Plans and specifications		368,000		368,000		368,000		21,000
Construction of buildings		5,052,000		5,052,000		3,947,000		
Construction of buildings (liquidation of contract authority)		860,000		860,000		860,000		860,000
Office of Education:								
Promotion and further development of vocational education (annual appropriation)		34,897,081		33,750,081		33,750,081		32,602,081
Promotion of vocational education (permanent appropriation)		7,138,331		7,138,331		7,138,331		7,138,331
Further endowment of colleges of agriculture and the mechanic arts (annual appropriation)		2,501,500		2,501,500		2,501,500		2,501,500
Colleges of agriculture and the mechanic arts (permanent appropriation)								
Grants for library services		2,550,000		2,550,000		2,550,000		2,550,000
Payments to school districts		7,500,000		6,000,000		6,000,000		5,150,000
Assistance for school construction		164,000,000		164,000,000		130,000,000		142,300,000
Expansion of teaching in education of the mentally retarded		61,135,000		61,135,000		50,800,000		38,500,000
Defense educational activities		1,000,000		1,000,000		1,000,000		1,000,000
Salaries and expenses	1,163	224,200,000		225,450,000		195,000,000		150,000,000
Office of Vocational Rehabilitation:		16,018,850	1,103	14,719,600	1,062	13,575,000	1,022	12,800,000
Grants to States		52,400,000		51,900,000		51,900,000		51,900,000
Research and training		13,300,000		13,000,000		12,500,000		12,500,000
Salaries and expenses	213	1,936,000	195	1,838,000	184	1,738,000	184	1,738,000
Public Health Service: ⁴								
Assistance to States, general	952	27,998,900	842	24,274,000	802	23,082,000	741	22,497,000
Grants and special studies, Territory of Alaska	76	2,199,000	76	2,189,000				
Construction of Arctic Health Research Center		367,000		367,000				

Control of venereal diseases.....	381	4,722,200	381	5,610,000	377	5,383,000	377	4,673,000
Control of tuberculosis.....	239	5,758,000	227	6,535,000	220	6,486,000	220	5,452,000
Communicable disease activities.....	1,078	8,439,800	981	7,943,000	1,015	8,326,000	1,015	8,015,000
Sanitary engineering activities.....	1,344	19,127,100	1,223	16,140,000	1,136	15,461,000	1,032	14,275,000
Buildings and facilities, Cincinnati, Ohio.....		785,000		785,000		45,000,000		20,000,000
Grants for waste treatment works construction.....		45,000,000		45,000,000		121,200,000		101,200,000
Grants for hospital construction.....	20	151,200,000	20	121,200,000	20	1,777,000	20	1,604,000
Salaries and expenses, hospital construction services.....	201	1,798,000	192	1,798,000	189	1,777,000	169	1,604,000
Hospitals and medical care.....	7,345	50,613,700	7,219	748,354,000	6,992	46,454,000	6,855	45,600,000
Construction of hospitals and related facilities.....		8,000,000						
Foreign quarantine activities.....	733	5,326,900	665	4,725,000	649	4,625,000	619	4,460,000
Indian health activities.....	5,736	50,100,000	4,974	45,006,000	4,899	44,006,000	4,831	43,500,000
Construction of Indian health facilities.....		10,000,000		10,000,000		6,903,000		3,087,000
General research and services, National Institutes of Health.....	286	35,299,000	268	35,066,000	268	30,766,000	268	28,974,000
National Cancer Institute.....	1,362	81,914,000	1,362	80,463,000	1,362	80,232,000	1,346	75,218,000
Mental health activities.....	787	59,033,000	756	54,046,000	756	53,966,000	750	52,384,000
National Heart Institute.....	745	52,930,000	675	47,700,000	675	47,671,000	671	45,594,009
Dental health activities.....	299	9,907,000	289	8,374,000	283	7,715,000	253	7,420,000
Arthritis and metabolic disease activities.....	507	37,014,000	484	32,570,000	484	32,564,000	484	31,215,000
Allergy and infectious disease activities.....	588	29,126,000	557	25,379,000	557	25,379,000	557	24,071,000
Neurology and blindness activities.....	368	32,727,000	361	30,813,000	361	30,803,000	361	29,403,000
Grants for construction of health research facilities.....		30,000,000		30,000,000		30,000,000		20,000,000
Research facilities construction and site acquisition.....		300,000		300,000		200,000		150,000
Construction of animal quarters, Hamilton, Mont.....		150,000		150,000		150,000		150,000
Construction of research facilities, Lexington, Ky.....		350,000		350,000		350,000		
Construction of physical biology building.....		480,000		480,000				
Construction of animal quarters.....		⁸ 378,000						
Operations, National Library of Medicine.....	227	1,638,000	227	1,638,000	227	1,638,000	224	1,566,000
Retired pay of commissioned officers.....		(1,753,000)		⁹ (1,753,000)		(1,753,000)		(1,753,000)
Salaries and expenses.....	660	6,902,100	624	6,538,000	600	6,398,000	577	5,816,000
National Institutes of Health management fund.....	3,673	(23,914,000)	3,543	(22,770,000)	3,543	(22,750,000)	3,543	(22,929,000)
St. Elizabeths Hospital:								
Salaries and expenses.....	3,123	3,739,000	3,123	3,838,000	3,023	3,715,000	3,023	3,715,000
Major repairs and preservation of buildings and grounds.....		430,000		430,000		330,000		330,000
Construction and equipment, treatment and cafeteria building.....								
Construction, continued treatment building.....		4,155,000		4,420,000		4,420,000		
Extension and modernization of administration building.....		200,000		200,000		200,000		
		464,000		501,000				

See footnotes at end of table.

Comparison of operating agency requests, Department requests, and President's budget estimate, fiscal year 1960—Continued

	Preliminary agency request to Department ¹		Preliminary Department request to Bureau of Budget		Final Department request to Bureau of Budget		President's budget	
	Positions	Amount	Positions	Amount	Positions	Amount	Positions	Amount
Social Security Administration:								
Limitation on salaries and expenses, BOASI.....	(26, 361)	(\$214, 337, 000)		(\$214, 337, 000)	(26, 361)	(\$214, 337, 000)	(25, 579)	(\$191, 600, 000)
Reimbursement to the Federal old-age and survivors' insurance trust fund for military service credits.....		¹⁰ (80, 000, 000)		¹⁰ (80, 000, 000)				
Grants to States for public assistance.....		¹¹ 2, 047, 100, 000		¹¹ 2, 047, 100, 000		2, 047, 100, 000		2, 033, 500, 000
Salaries and expenses:								
Bureau of Public Assistance.....	335	2, 759, 800	309	2, 495, 000	309	2, 495, 000	288	2, 345, 000
Children's Bureau.....	298	2, 592, 000	286	2, 515, 000	286	2, 515, 000	259	2, 300, 000
White House Conference on Children and Youth.....	18	200, 000	18	200, 000	18	200, 000	18	200, 000
Grants to States for maternal and child welfare.....		58, 500, 000		48, 500, 000		46, 000, 000		43, 500, 000
Grants for social security training and studies.....	15	7, 130, 000	13	4, 110, 000	13	3, 095, 000	11	1, 785, 000
Salaries and expenses, Office of the Commissioner.....	66	337, 000	66	337, 000	66	337, 000	66	337, 000
Office of the Secretary:								
Salaries and expenses:								
Office of the Secretary.....	315	2, 260, 000	312	2, 228, 000	310	2, 200, 000	301	2, 151, 000
Old-Age and Survivors Insurance transfer.....		(344, 000)		(339, 000)		(339, 000)		(318, 000)
Office of Field Administration.....	567	2, 941, 000	535	2, 849, 000	533	2, 818, 000	515	2, 735, 000
Old-Age and Survivors Insurance transfer.....		(1, 034, 000)		(992, 000)		(992, 000)		(928, 000)
Office of the General Counsel.....	179	718, 000	179	718, 000	174	687, 000	150	619, 000
Old-Age and Survivors Insurance and Food and Drug transfers.....		(610, 000)		(610, 000)		(610, 000)		(546, 000)
Surplus property utilization.....	105	838, 000	105	838, 000	105	828, 000	93	703, 000
White House Conference on Aging.....	31	452, 000	31	452, 000	31	452, 000	31	452, 000
Total appropriation.....	64, 226	3, 548, 673, 262	62, 238	3, 454, 006, 512	61, 400	3, 332, 540, 912	59, 726	3, 173, 605, 912
Transfers.....		(1, 988, 000)		(1, 941, 000)		(1, 941, 000)		(1, 790, 000)

¹ Adjusted to include pay increases.

² Since the food additives legislation was enacted in the closing days of the 85th Cong., there is included in this estimate \$954,500 required for this purpose. The remaining request to Budget Bureau and the President's budget do include appropriate amounts.

³ Originally planned for conversion from a special fund to a revolving fund in fiscal year 1960.

⁴ Includes \$64,000 for Alaska technical assistance; comparable to Budget Bureau allowance.

⁵ Includes \$487,000 for Alaska research; comparable to Budget Bureau allowance.

⁶ The final Department request to the Budget Bureau has been adjusted for comparative transfers to "Assistance to States, general"; comparable to Budget Bureau allowance.

⁷ Includes \$1,982,000 for dependents' medical care which was estimated for under "Commissioned officers: retired pay and dependents' medical care."

⁸ Preliminary estimate contemplated release of reserve of \$150,000 in 1959.

⁹ Estimated for under "Commissioned officers: retired pay and dependents' medical care."

¹⁰ President recommended that this reimbursement be handled by other means than an appropriation from the general fund in his budget message to Congress.

¹¹ Based on trends at time President's budget document was prepared, Department subsequently revised its estimate to \$2,033,500,000.

We are very happy to have with us the Secretary of Health, Education, and Welfare. We are delighted to have you here, sir, and we would be delighted to have you proceed in your own way.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

1960 BUDGET ESTIMATES

STATEMENTS OF HON. ARTHUR S. FLEMMING, SECRETARY OF HEALTH, EDUCATION, AND WELFARE; ACCOMPANIED BY ELLIOT L. RICHARDSON, ASSISTANT SECRETARY; RUFUS E. MILES, JR., DIRECTOR OF ADMINISTRATION; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

PREPARED STATEMENT

Secretary FLEMMING. Thank you, Mr. Chairman.

As you know, the House Committee on Appropriations reported out the Labor-HEW appropriations bill for fiscal year 1960 yesterday. I am sure that the committee is not only interested in a summary and explanation of the President's budget for 1960, but would like to hear from the Department with respect to its views on the House committee action.

With this in mind, Mr. Chairman, I would like to dispense with reading my full opening statement which summarizes and explains the budget for 1960 and, if it meets with your approval, file this statement for the record.

Senator HILL. We would be very happy to have that done. We will file your full statement in the record at this point.

(The statement referred to follows:)

Mr. Chairman and members of the committee, I welcome the opportunity to appear here today and discuss the Department's programs and plans and to present briefly the highlights of the 1960 budget for the Department, preparatory to your more detailed discussion with the program people in each of our areas of responsibility.

Since I assumed office, last August, I have devoted a considerable amount of time to the budget. I used this approach to familiarize myself with the Department's many programs and activities, and in the process worked out with each of the operating agencies budget plans for 1960. Although I have long been aware of the importance of the programs of this Department, I confess that I never fully appreciated the tremendous variety of functions, all of which affect the day-to-day activities of the people of this country.

I feel that it is both an honor and a privilege to be associated with the newest Department of our Government. Nowhere can one find more challenging opportunities for service than in the Department of Health, Education, and Welfare. The programs make significant and worthwhile contributions to the lives of the people of the country and cope with many of the more urgent problems of national concern in our complex society.

I have found that these programs are in good hands, administered by enthusiastic and dedicated people.

I am informed that this subcommittee has taken a special interest in these programs and is well informed about our many activities. It is evident that the joint goal of the executive branch and the Congress is that of improving Federal programs which promote the welfare of the Nation's most important resource—people. I welcome the opportunity to work with you toward that end.

The 1960 budget does continue, I believe, forward progress in health, education, and welfare services to the American people.

The President has explained the basic principles which he has kept in mind in developing the overall budget for the executive branch—principles that are designed both to protect the economic security of our people through combating inflation and also to insure the fiscal integrity of the Government itself.

These principles have been applied to the preparation of this Department's budget.

At the same time, the President has kept before him the necessity of making a continuing investment in the human resources of the Nation. That is why the budget that is now before this committee is a budget that, if approved, will enable us to move forward on many fronts.

The 1960 budget for our Department requests \$3.176 billion in appropriations which is \$206 million above the amount thus far provided for 1959. However, appropriations totaling \$284.7 million are pending in the Senate committee recommendations on the second supplemental appropriation bill, 1959. If these additional funds are granted by the Congress, the 1960 appropriations will be \$78.8 million less than the 1959 total. The net decrease of \$78.8 million from 1959 is composed of decreases totaling \$211.7 million, primarily related to construction and construction grants, partially offset by increases totaling \$132.9 million.

The principal area of decrease in the Department's budget relates to direct Federal construction and construction grants. This decrease of approximately \$151.5 million results from the application of a governmentwide policy to defer Federal construction and to decrease support of non-Federal construction. Other decreases relate to assistance for school construction and operation of schools in federally affected areas, and reflect the expiration of authority to make grants for training graduate nurses and public health personnel, the transfer of special health grants for Alaska to a transitional grant fund appropriated to the President, and the reduction of tuberculosis and venereal disease control programs to the same level as was requested in the 1959 budget.

Certain appropriations are requested in the 1960 budget to continue programs at approximately the same level as was achieved in 1959. The major programs in this category are those administered by the National Institutes of Health; grants for support of general public health activities; and grants to States for maternal and child health and welfare.

Increases are requested for the remaining areas of the Department's budget which reflect, I believe, the basic policy that has guided the administration, that is, of being liberal in the field of human affairs.

The principal items of increase are for:

1. Strengthening the enforcement of the pure food and drug laws-----	+ \$880, 000
2. Implementing the National Defense Education Act-----	+ 34, 700, 000
3. Expanding the services of the Office of Education, including cooperative research in education-----	+ 3, 172, 500
4. Instituting a program of grants for expansion of teaching in the education of the mentally retarded-----	+ 1, 000, 000
5. Augmenting the programs for the vocational rehabilitation of the handicapped-----	+ 8, 223, 000
6. Increasing in selected areas the availability of services, research, and training in order to promote a broader attack on public health problems-----	+ 2, 552, 000
7. Strengthening of direct medical care programs of the Department administered by the Public Health Service, Freedmen's Hospital, and St. Elizabeths Hospital-----	+ 2, 492, 500
8. Providing the increased funds required for Federal grants to States to assist needy aged, blind and disabled persons, and dependent children-----	+ 75, 540, 000
9. Initiating a program of research and training in the welfare field to assist individuals to achieve self-help and self-care-----	+ 1, 785, 000
10. All other budget increases-----	+ 2, 615, 800

This listing demonstrates that the program needs of each of the three areas of health, education, and welfare have been considered in the development of the 1960 budget and that selected increases are provided for each area.

In the discussion which follows, I would like to comment upon the 1960 budget plan as it is related to the programs of the several operating agencies with emphasis on significant changes in 1960 over 1959 including supplemental appropriations recommended by the Senate committee. Federal direct construction

and construction grant activities are discussed separately on a departmentwide basis.

Affiliated institutions, +\$234,700

The 1960 budget continues the policies of recent years by providing additional funds to improve the educational opportunities of the special groups of students served by the three institutions affiliated with our Department.

Both Gallaudet College and Howard University are budgeted for increases which contemplate expansion of their teaching programs so that they may take another step toward our joint goal of providing a first-rate education for their students. Additional faculty positions are planned at both schools to meet the requirements of increased enrollments and to permit a strengthening of the standards of instruction.

The same amount is requested for the American Printing House for the Blind as was appropriated in 1959. This is the full authorization available under the present law.

Food and Drug Administration, +\$880,000

The 1960 budget proposes an expansion of the programs of the Food and Drug Administration which are designed to protect the public against unsafe, insanitary, and fraudulent foods, drugs, and cosmetics. The need for such expansion was emphasized by the report of the Citizens Advisory Committee. This committee, composed of representatives of the food and drug industries, labor, consumers, and other groups, recommended, as you know, a threefold to fourfold increase in the administration's operations over a 5- to 10-year period.

From fiscal year 1956 to 1959, through the joint efforts of the executive branch and Congress, we have been able to strengthen the enforcement and inspectional activities of the Food and Drug Administration through a 43-percent increase in staff and a 59.5-percent increase in operating expenses. In addition, a supplemental estimate requested in 1959 and recommended by the Senate committee proposes a further 7-percent staff increase over 1956. This latter increase is directly related to the administration of the food additives amendment enacted late in the last session of Congress and is necessary if we are to begin promptly to discharge our duty to establish the safety of every additive used in the preparation, processing, preservation, and packaging of foods for human and animal consumption.

The 1960 budget continues the forward progress of recent years by providing a further 10-percent increase in staff for the overall administration of programs of the Food and Drug Administration, including increases related to expanded activities under the food additives amendment. Other items in the 1960 budget are the continuation of the program to modernize and replace obsolete or wornout equipment and the staffing and opening of a new district office in the Dallas, Tex., area.

Freedmen's Hospital, +\$78,500

The 1960 budget anticipates a higher level of reimbursements for Freedmen's Hospital and also requests additional appropriations. Relatively small increases are planned for several areas of operation in order that the hospital's present program of medical care can be improved to provide at least the minimum level of services consistent with modern professional standards.

Office of Education, -\$7,725,500

Among the factors having the greatest impact on the program of the Office of Education during the past year has been the enactment of the National Defense Education Act by the last session of Congress and the response of the public and the educators of this country to the challenges posed by that act and the opportunities provided by it. In order to meet this response, we have requested a 1959 supplemental appropriation and further funds in 1960 to provide increases for all programs, except one, authorized by this act. The very newness of these programs makes estimating of needs difficult. As the President noted in his budget message, we are continuing to study these activities as the programs develop; and, if circumstances warrant it, we will come before Congress again with revised estimates of our 1960 needs.

As would be expected, the bulk of the increased funds for administrative services of the Office are those related to the administration of the complex provisions of the Defense Education Act. However, the budget also recommends additional funds needed for other essential functions of the Office of Education.

Among these are the expansion of the program of cooperative research in important educational problems, the improvement of educational statistics which are needed particularly for planning purposes, and provisions for several programs authorized by the last session of Congress. These include captioned films for the deaf, science clubs, amendments to the laws authorizing school assistance in federally affected areas, and grants to expand the teaching of education of mentally retarded children.

This latter program provides grants to State educational agencies and to public or other nonprofit institutions in order that training can be extended to leaders in programs of education of the mentally retarded. The 1960 budget estimate would enable 20 training grants to be made to institutions of higher learning, would permit approximately 100 traineeship grants to be made to recipients selected by these institutions and would provide, in addition, an average of 2 traineeships per State for recipients to be selected by each State educational agency.

No significant change is contemplated in the levels of support for three grant programs administered by the Office—grants for vocational education, library services, and land-grant colleges. Funds are requested for these programs at the budget level which will actually be reached in 1959. The estimate for vocational education grants recognizes that there will be unobligated balances during the current fiscal year in the amounts appropriated for training in commercial fishing and in practical nursing, and the 1960 budget is designed to make available the same level of funds as was estimated at the time of the submission of the budget to be used in 1959. The appropriation requested for library services is also lower in 1960 than in 1959. However, total available funds for library services will be approximately the same in both years since the law provides that the estimated unobligated balance in 1959 may be used by States in 1960. The same amount is requested for land-grant colleges as has been appropriated for the past several years.

The total request for school assistance in federally affected areas represents the same level as was initially appropriated for 1959. The \$180.8 million already appropriated by Congress for these programs permitted payments for operation and maintenance of schools to be made at 85 percent of full entitlement and made funds available for construction of schools on a priority basis. The 1960 budget carries out these policies but provides a redistribution of funds between the two programs in order to effect a continuation of the 85 percent rate on payments for operation and maintenance. Construction projects will be financed on a priority basis.

The 1960 budget estimate reflects generally the belief of the administration that Federal participation in these programs should be restricted. Legislation framed along these lines is now being drafted.

Office of Vocational Rehabilitation, +\$8,223,000

Significant progress is being made each year toward the goals embodied in the 1954 vocational rehabilitation amendments which were sponsored by this administration. One measure of accomplishment can be seen in the fact that an estimated 82,000 disabled persons will be rehabilitated in 1959 as compared with 74,317 rehabilitations in 1958 and 55,825 in 1955.

The vocational rehabilitation program possesses great human, social, and economic values. The human and social values are self-evident. The economic values are convincing. For example, of the over 74,000 persons rehabilitated in 1958, about 54,000 were unemployed when their rehabilitation program began. And nearly 15,000 of those rehabilitated received public assistance at some time during the process. Furthermore, the Federal tax receipts derived as a result of a rehabilitant's earnings far exceed the cost of his rehabilitation.

The 1960 budget recognizes these values by permitting further expansion of this program and has as its goal the rehabilitation of 90,000 disabled individuals. With this objective in mind, it requests funds at a rate which permits States to augment their rehabilitation services as rapidly as their own funds will permit. In addition, the budget continues the development of the rehabilitation research and training programs which make significant contributions to the whole process of rehabilitation.

Public Health Service, +\$156,262,818

In cooperation with State and local health departments and with the complex network of public and nonprofit research and training institutions throughout the country, the Public Health Service has been able to mount in recent years

an attack on a broad front of public health problems. For example, this committee is fully aware of the extent to which the Service and non-Federal agencies have participated in the programs of polio prevention and, more recently, in the control of Asian influenza.

On an overall basis, the 1960 budget carries a net decrease for the activities of the Public Health Service primarily because of reductions in funds for construction and construction grants which I will discuss later. At the same time, selected increases are proposed to enhance the ability of the Service to improve the prevention, care, and cure of illnesses of acknowledged public health concern. Furthermore, the budget looks ahead to emerging health problems and attempts to provide the resources for their study and solution.

One of the most serious of these emerging problems is the rapid nationwide spread of staphylococcal infections arising from the growth of drug resistant strains of bacteria. Three thousand deaths a year is a conservative estimate of the public health impact of these diseases. Our past advances in pharmacology have, in a sense, partially caused this problem. The successful introduction of antibiotics in the period during and since World War II has tended to develop drug-resistant strains which produce diseases ranging from mild forms of impetigo to pneumonia and death. The proposed increase in 1960 will enable the program for control of this problem which was initiated in 1959 to be placed in full operation in 1960.

Increased emphasis also is planned in the 1960 budget on such environmental health problems as the control of air pollution and the control of radiological hazards.

One of the primary sources of air pollution in our heavily populated areas is the contamination produced by automotive exhaust fumes. More intensive research is planned in 1960 on this problem.

Activities in the radiological health field would be more than doubled in the 1960 budget in recognition of the fact that the health effects of radiation are becoming a prime public health concern. The requested increase would be used for (1) expansion of epidemiological studies on the long-term cumulative effects of radiation on humans and animals and for the increase of research on the public health significance of background radiation hazards; (2) an increase, through graduate and short course training, in the number of trained and technically competent public health workers in the field of radiological health; and (3) the provision of expanded on-the-spot technical consultation to States and communities in this important field.

Other more general training assistance in the public health field will be provided through the plan to initiate the program of grants to schools of public health authorized by Congress at the last session. A supplemental appropriation of \$500,000 was submitted for this purpose in 1959 and a doubling of Federal funds is requested in 1960 for this purpose. House action and the Senate committee recommendations would provide \$450,000 for these grants in 1959. These grants will help alleviate the financial deficits presently borne by schools of public health when training students for Federal, State, and local public health work.

A recent development of considerable public health importance is the fluorescent antibody technique for laboratory diagnosis of disease which was developed by the Communicable Disease Center at Atlanta, Ga. This technique holds real promise of developing a rapid, cheap, and accurate means of identifying disease-causing organisms. Tests for 50 different organisms are currently in various stages of research and development. Although this is a good beginning, with further development, there can be literally hundreds of applications of this technique. The 1960 budget reflects this by requesting funds which will permit expansion of our efforts in this area.

In another health field, the goal of better medical care for the beneficiaries of the Public Health Service can be more closely approached through the additional funds requested in the 1960 budget for the hospitals and medical care and Indian health activities appropriations. The largest of these increases is designated for expansion and improvement of the Indian health program with the goal of offering modern medical services to Indians and Alaskan natives. Substantial increases have been appropriated for this program in recent years, but further increases are necessary to reach our goal. The proclamation of Alaskan statehood will not change the operation of the Indian health program in that area.

Several other areas are earmarked for additional funds in order to bolster our overall public health efforts. These include the operations of the National

Library of Medicine, the Foreign Quarantine Service, and the Office of the Surgeon General.

As I pointed out above, the appropriations for the National Institutes of Health are continued in 1960 at the 1959 level. Intensive study of the Bayne-Jones Committee report and related studies has shown that additional funds for the programs for the National Institutes of Health could be effectively used. Nevertheless, we do not recommend additional appropriations for 1960. This decision is based on the following factors: (1) The budget for the National Institutes of Health has shown a 199 percent increase in the period 1956 through 1959 and is now sufficiently high so that an effective research program can be conducted within it; (2) the administration wishes to encourage diversified support for medical research from private philanthropic and State governmental sources and does not wish to preempt this field by attempting to provide funds for all newly developed research projects; and (3) recommendations for additional appropriations, at this time, would tend to undermine the fiscal integrity of the President's budget by opening the way to generation of further requests for increases.

St. Elizabeths Hospital, +\$383,000

This institution has a special responsibility to provide high quality care to mentally ill patients who are residents of the District of Columbia and to certain classes of Federal beneficiaries.

The budget of the hospital is shared by the Federal Government and the District of Columbia, the latter's share being approximately 75 percent of the total cost.

The increases proposed in 1960 both in reimbursements and in appropriations for operations will permit the opening of the new maximum security building which is now nearing completion, will enable some improvement to be made in patient care in now critically understaffed areas and will allow correction of several minor operational deficiencies which were noted last year by the Joint Commission on Accreditation of Hospitals.

Social Security Administration

In the programs of the Social Security Administration which intimately touch the lives of millions of individuals in their everyday efforts to maintain themselves, we must not overlook the need for positive, forward-looking approaches. We must not be content merely to help provide welfare recipients with minimum standards of living, as important as that aim must be, but we must be alert to the possibility of assisting individuals to attain productive and self-reliant lives. The 1960 budget plans for the several bureaus of the Social Security Administration do, I believe, make limited but significant contributions of this positive nature.

Public assistance activities, +\$75,718,500.—Higher levels of funds are requested in both a 1959 supplemental appropriation and in the 1960 budget for the Federal share of the joint Federal-State program of assistance to needy aged, blind and disabled individuals as well as to dependent children. A substantial part of the increase results from the passage of the 1958 Social Security Act amendments. The increases in 1960 over the 1959 total estimate will permit the Federal Government to fulfill its obligation to finance a portion of the rising costs attributable to (1) a small increase in the estimated average monthly payment per recipient under all programs; (2) an increase in the estimated number of recipients under all programs except old-age assistance which reflects a decrease due to the continuing growth in the number of recipients who receive old-age and survivors insurance benefits; and (3) an increase for State and local administration for all programs primarily because of estimated increases in average monthly salaries of public assistance employees and the growth in the number of staff particularly to provide services to recipients directed toward self-care, self-support, and strengthened family life.

Federal administrative services will also be strengthened under the budget plan. Special emphasis will be given in the area concerned with the administration of medical care programs for assistance recipients.

Children's Bureau activities, +\$178,000.—Additional resources will be applied under the 1960 budget estimates to the activities of the Children's Bureau which are directed toward improving the health and welfare of the youth of our country and preventing and coping with problems of juvenile delinquency. These increases will enable the Bureau to serve States better when they request tech-

nical consultation and assistance, and will also permit a wider dissemination of the Bureau's publications, including the well-known "Infant Care."

A particularly urgent need has become apparent in the field of services for children with congenital heart disease. A supplemental appropriation has been proposed in 1959 in recognition of this need, and it has been suggested that these funds be available both in fiscal years 1959 and 1960. Both House action on this estimate and the Senate committee recommendation would provide the funds requested for this purpose.

The basic grants to State programs for maternal and child health services, crippled children's services, and child welfare services are continued in the 1960 budget at the same level as was appropriated in fiscal year 1959.

Associated with these activities is an increase requested to permit the completion of planning and the holding of the President's Conference on Children and Youth. This conference has been called for March 1960.

Research and training activities, +\$1,785,000—A new activity is proposed in 1960 in order to carry out more effectively our responsibilities as delineated by the Social Security Amendments of 1956. These amendments emphasized the importance of encouraging States to help individuals to achieve self-support, self-care, and personal independence. Continual limited activity of this nature is carried out under the present joint Federal-State programs. However, I believe that this activity is not in itself sufficient to perform fully our duties under the law.

A focus is needed for activities of this type, and additional resources must be made available (1) to the States and localities in the form of facilities whereby they can obtain better trained public welfare workers and (2) to the social insurance and welfare profession as a whole in the form of increased knowledge. The 1960 budget provides a specific opportunity for doing this by proposing the implementation of the program of grants to States for training public welfare workers and the program of cooperative studies into the causes of dependency and the methods of eliminating those causes. This dual program should directly aid in improving the administration of the public-welfare programs.

Bureau of Old-Age and Survivors Insurance activities, +\$19,169,000.—Before I leave this portion of my discussion, I would like to comment upon the program of the Bureau of Old-Age and Survivors Insurance. The old-age, survivors, and disability insurance programs, financed by tax contributions from employers, employees, and the self-employed, have expanded dramatically in recent years. Yet the expansion has been carefully planned, and the financial condition of the trust funds is today, and will continue to be, financially and actuarially sound. In 1960, over 14.2 million beneficiaries will receive approximately \$10.5 billion in benefit payments. These figures are almost overwhelming, but they reflect the fact that these programs assist millions of individuals to more satisfying lives and afford a stabilizing element in the national economy.

Amendments to the Social Security Act in recent years have had a sharp impact on the workload of the Bureau. The latest in this series, the 1958 amendments, are currently having an important program effect. To process the resulting increased workloads promptly and efficiently, a supplemental appropriation has been proposed for administrative expenses in 1959; and additional funds are requested for this purpose in 1960. These increases are consistent with the concept of timely services to claimants and with the need to maintain prudent management of the funds entrusted to us.

Office of the Secretary, +\$432,600

I expect to appear before your committee at the close of your hearings to discuss the Office of the Secretary appropriation and any other matters you wish to take up with me at that time. I will simply note that increases are requested in 1960 to enable this Office to function more effectively and will defer a more detailed discussion until the committee considers this specific estimate.

White Conference on Aging, +\$318,000

Additional funds are also requested both in 1959 and 1960 for the White House Conference on Aging. This item will be discussed more extensively by the Under Secretary.

Direct Federal construction and construction grant programs, —\$151,512,000

At this point, I should like to turn to a discussion of direct Federal construction and construction grant programs. This discussion was deferred to this point since it seems possible to comment more adequately at one place upon the

relevant factors which affected policies and plans pertaining to construction throughout the Department.

Sizable reductions are planned in 1960 for the construction programs of this Department. Part of the reduction is due to specific nonrecurring construction items which were included in the 1959 appropriations, such as construction of two facilities for the National Institutes of Health and a grant to Alaska for the construction of mental health facilities. By far the larger proportion of the decreases in appropriations related to construction is due, however, to the application of a governmentwide policy that, in general, direct construction starts would be deferred and grant support for construction projects should decline as a means of combating inflation and in order to promote economy in Federal operations. This policy also recognized that part of the higher construction appropriations enacted in 1959 were designed to help overcome the recessionary tendencies then evident in our economy.

The application of this policy occasions the reduced requests for grants for hospital construction, grants for construction of waste treatment facilities, and grants for medical research facilities.

Limited exceptions have been made to these policies, however, to meet pressing direct Federal equipment and facility needs.

Among these exceptions is the program of construction of Indian health facilities. The 1959 supplemental estimate which has been submitted requests additional funds for the construction of a new hospital. The Senate committee has recommended the full amount of this request. Planning funds for another hospital are included in the 1960 budget as well as funds for construction of personnel quarters and for alteration, renovation, furnishing, and equipment of various hospitals and clinics.

The growing needs of the Bureau of Old-Age and Survivors Insurance are recognized through a 1959 supplemental estimate which has been submitted in order to finance enlargement of the administration and operations building now under construction near Baltimore. This additional cost which will be borne by the old-age, survivors, and disability trust funds was approved by the Senate Appropriations Committee in its report on the second supplemental appropriations bill.

Other increases will provide funds for programs of modernization and renovation of older buildings at St. Elizabeths Hospital and Gallaudet College, for a small planning project at Howard University and for programs related to the construction of two animal facilities for the National Institutes of Health.

Conclusion

In conclusion, may I note that I believe this budget to reflect constructive and imaginative thinking about the health, education, and welfare needs of our country. It permits another step forward in that progression of steps which has marked the program of our Department since its establishment. The joint interest of the administration and the Congress in our activities is amply demonstrated by the fact that in 1960 the budget requests a total of approximately \$3.2 billion as compared with appropriations of about \$1.9 billion in 1954. The increase of \$1.3 billion represents a 68-percent increase in our appropriations on an overall basis.

This record should provide a sound basis on which to build in the future.

I thank this committee for the opportunity it provided for discussion of our plans and programs.

GENERAL STATEMENT

Secretary FLEMMING. It might prove helpful, however, if I summarize this statement in order to put the budget in context and then proceed to discuss the effect of House committee action.

I welcome the opportunity to appear here today and discuss the Department's programs and plans and to present briefly the highlights of the 1960 budget for the Department preparatory to your more detailed discussion with the program people in each of our areas of responsibility.

Since I assumed office last August, I have devoted a considerable amount of time to the budget. I used this approach to familiarize

myself with the Department's many programs and activities; and, in the process, worked out with each of the operating agencies budget plans for 1960.

VARIETY OF DEPARTMENTAL FUNCTIONS

Although I have long been aware of the importance of the programs of this Department, I confess that I never fully appreciated the tremendous variety of functions, all of which affect the day-to-day activities of the people of this country.

I feel that it is both an honor and a privilege to be associated with the newest department of our Government. Nowhere can one find more challenging opportunities for service than in the Department of Health, Education, and Welfare. The programs make significant and worthwhile contributions to the lives of the people of the country and cope with many of the more urgent problems of national concern in our complex society.

I have found that these programs are in good hands, administered by enthusiastic and dedicated people.

I am informed that this subcommittee has taken a special interest in these programs and is well informed about our many activities. It is evident that the joint goal of the executive branch and the Congress is that of improving Federal programs which promote the welfare of the Nation's most important resource—people. I welcome the opportunity to work with you toward that end.

The 1960 budget does continue, I believe, forward progress in health, education, and welfare services to the American people. The President has explained the basic principles which he has kept in mind in developing the overall budget for the executive branch—principles that are designed both to protect the economic security of our people through combating inflation and also to insure the fiscal integrity of the Government itself.

These principles have been applied to the preparation of this Department's budget.

At the same time, the President has kept before him the necessity of making a continuing investment in the human resources of the Nation. That is why the budget that is now before this committee is a budget that, if approved, will enable us to move forward on many fronts.

TOTAL BUDGET REQUESTS

The 1960 budget for our Department requests \$3.176 billion in appropriations which is \$206 million above the amount thus far provided for 1959. However, appropriations totaling \$284.7 million are pending Senate action on the second supplemental appropriation bill, 1959.

If these additional funds are granted by the Congress, the 1960 appropriations will be \$78.8 million less than the 1959 total. The net decrease of \$78.8 million from 1959 is composed of decreases totaling \$211.7 million, primarily related to construction and construction grants, partially offset by increases totaling \$132.9 million.

DECREASES IN CONSTRUCTION ITEMS

The principal area of decrease in the Department's budget relates to direct Federal construction and construction grants. This decrease

of approximately \$151.5 million results from the application of a Government-wide policy to defer Federal construction and to decrease support of non-Federal construction. Other decreases relate to assistance for school construction and operation of schools in federally affected areas and reflect the expiration of authority to make grants for training graduate nurses and public health personnel, the transfer of special health grants for Alaska to a transitional grant fund appropriated to the President and the reduction of tuberculosis and venereal disease control programs to the same level as was requested in the 1959 budget.

Certain appropriations are requested in the 1960 budget to continue programs at approximately the same level as was achieved in 1959. The major programs in this category are those administered by the National Institutes of Health; grants for support of general public health activities and grants to States for maternal and child health and welfare.

INCREASES REQUESTED

Increases are requested for the remaining areas of the Department's budget which reflect, I believe, the basic policy that has guided the administration, that is, of being liberal in the field of human affairs. The principal items of increase are for—

1. Strengthening the enforcement of the pure food and drug laws, \$880,000.
2. Implementing the National Defense Education Act, \$34,700,000.
3. Expanding the services of the Office of Education, including cooperative research in education, \$3,172,500.
4. Instituting a program of grants for expansion of teaching in the education of the mentally retarded, \$1 million.
5. Augmenting the programs for the vocational rehabilitation of the handicapped, \$8,223,000.
6. Increasing in selected areas the availability of services, research and training in order to promote a broader attack on public health problems, \$2,552,000.
7. Strengthening of direct medical care programs of the Department administered by the Public Health Service, Freedmen's Hospital, and St. Elizabeths Hospital, \$2,492,500.
8. Providing the increased funds required for Federal grants to States to assist needy aged, blind, and disabled persons, and dependent children, \$75,540,000.
9. Initiating a program of research and training in the welfare field to assist individuals to achieve self-help and self-care, \$1,785,000.
10. All other budget increases, \$2,615,800.

This listing demonstrates that the program needs of each of the three areas of health, education, and welfare have been considered in the development of the 1960 budget and that selected increases are provided for each area.

May I note that I believe this budget to reflect constructive and imaginative thinking about the health, education, and welfare needs of our country. It permits another step forward in that progression of steps which has marked the program of our Department since its establishment.

The joint interest of the administration and the Congress in our activities is amply demonstrated by the fact that in 1960 the budget

requests a total of approximately \$3.2 billion as compared with appropriations of about \$1.9 billion in 1954. The increase of \$1.3 billion represents a 68 percent increase in our appropriations on an overall basis. This record should provide a sound basis on which to build in the future.

HOUSE ACTION

The House Appropriations Committee, in acting upon the Department's budget request for 1960 recommended appropriations for 1960 totaling \$3.348 billion. This recommendation exceeds the President's budget by \$181.4 million, composed of increases totalling \$183.4 million, offset by decreases in the amount of \$2.1 million.

The committees' action is, of course, an effort to provide through Federal appropriations a higher level of capital construction, medical research and training and educational services than is possible under the President's budget. It is entirely understandable that their enthusiasm for the programs has led them to make such a recommendation.

IMPACT OF INCREASES ON OVERALL BUDGET

Despite my similar enthusiasm for the programs, however, I must call to the attention of your committee the serious fiscal implications of such increases. The President's budget is a carefully considered financial plan and is a balanced budget. The importance of not spending beyond our prospective income in times of high economic activity has been many times stressed by the President as a primary test of fiscal responsibility. The increases contained in this bill alone would unbalance the budget and would thus be clearly contrary to the fiscal policies and recommendations of the President.

Viewed in the context of the total well-being of the people of the United States, even that part of the Federal budget which relates to the important programs of health, education, and welfare, needs to be kept in proper balance with other national needs.

Even in this area we need to assume our share of the very important responsibility of preventing inflation. If the Federal Government does not act to strengthen the economy, combat inflation, and assure fiscal stability, we will end up spending more dollars to buy less. The very people who are the most direct beneficiaries of the Department of Health, Education, and Welfare—and this includes a substantial segment of the American public—will suffer.

In particular, the 14 million beneficiaries of old-age and survivors insurance and the 6 million recipients of public assistance will be especially disadvantaged through the shrinkage in the value of their dollars.

The teachers, whose average salary level needs, for the Nation as a whole, to be doubled, may experience further erosion of their purchasing power. Only through a governmentwide and nationwide shared sense of responsibility for fiscal soundness and the prevention of inflation will we achieve the ends we seek.

The budget for the Department of Health, Education, and Welfare, though formulated within the framework of the fiscal limitations I have just mentioned, is a forwardlooking, progressive budget. It is a budget which attaches high priority to the important human needs represented by this Department.

DECREASE IN NEW OBLIGATIONAL AUTHORITY

Whereas new obligational authority requested for all of the executive branch shows a decrease of 6.8 percent, our Department shows a decrease of only 2.5 percent. As I have indicated, this reduction is more than accounted for by the reductions in funds for direct construction and construction grants.

Increases of high priority in such items as radiological health, Indian health, Public Health Service hospitals, enforcement of pure food and drug laws, the National Defense Education Act, educational research, vocational rehabilitation, and cooperative research and training in the welfare field have been provided for.

These and other increases, taken together with the other elements of the budget, including a number of appropriate decreases, form, in my judgment, a well-balanced and thoughtful fiscal plan for the Department in the light of our total fiscal situation.

HOUSE INCREASES OVER BUDGET REQUESTS

The House committee recommended gross increases over the President's budget totaling \$183.4 million. These increases can be grouped into four major areas:

1. Construction and construction grants, \$79.1 million.
2. Medical research, \$50 million.
3. Programs of school assistance in federally affected areas, \$44.3 million.
4. All other, \$10 million.

I should like to discuss briefly each of these areas.

CONSTRUCTION AND CONSTRUCTION GRANTS

The House committee proposes to increase the President's budget for this type of expenditure as follows:

Grants for hospital construction, \$42.5 million.

Grants for construction of medical research facilities, \$10 million.

Grants for construction of sewage-treatment facilities, \$25 million.

Grants for construction, Gallaudet College, \$150,000.

Indian health construction, \$1.5 million.

Mr. Chairman, the President's budget was prepared with a view to developing a tight budget and a balanced budget. One of the underlying policies of the budget was the deferment of Federal construction and the reduction of federally assisted construction. This policy was applied to the programs of this Department.

For as long as I can remember, every administration faced with a difficult fiscal situation has adopted similar policies of tightening the belt first in the areas of capital expenditures. The House committee quite apparently did not agree to this policy as it affects the programs of this Department.

QUESTION OF RELATIVE PRIORITY

While I realize that a case can be made for additional funds in the light of current needs, I believe the issue before you here is not one of program merit, but rather, one of relative priority in the light of the overall fiscal situation. I sincerely believe that we should defer

this construction support in order that we might contribute to fiscal stability a balanced budget and thus combat inflation.

MEDICAL RESEARCH

The House committee has recommended increased funds for the National Institutes of Health totaling \$50 million above the President's budget. Last week I addressed a letter to Mr. Fogarty, chairman of the Appropriations Subcommittee on Labor-HEW, and related agencies.

Inasmuch as this letter set forth my conclusion as a result of the study of long-term objectives in the field of medical research and the reasons for not amending the 1960 budget with your permission I should like to read that letter.

DEAR MR. FOGARTY: The President's budget message for 1960 indicated that I was completing a review of our long-term objectives in the field of medical research and training and that the results of this study in terms of programs and costs, including indirect costs, would be made available to the Congress. You will recall, of course, that in my testimony before your committee I expressed the hope that this review might be completed expeditiously and that the results might be made known to your committee before it completed its action on the 1960 budget. I regret that the review and the discussions growing out of it have required so much time. The purpose of this letter is to inform you of the results of this review.

Over the past 4 months I have spent much time with the Surgeon General of the Public Health Service, the Director of the National Institutes of Health, and their staffs, studying (1) the full implications of the report of the "Secretary's Consultants on Medical Research and Education"—the Bayne-Jones report—(2) data obtained from a supplementary study of 20 medical schools, conducted by the National Institutes of Health, and (3) recommendations of the Public Health Service based upon both of these studies plus additional analyses which they made. In brief these analyses indicate:

(a) That the basic objective of the Bayne-Jones study is highly commendable. The desirability of establishing a long-range goal for medical research based on all factors known and recognized at the time, with the intent of moving systematically toward such a goal is accepted as a sound and wise approach.

(b) That the proposed goal of \$350 million per year to be spent on medical research by the National Institutes of Health by 1970 was based on certain premises which were outdated by the time the report was printed, and that, in the judgment of most of those who reviewed the facts carefully, it would be possible to advance this goal by a few years. This goal might appropriately be used as a benchmark against which an annual review and evaluation should be made of proposed steps toward the goal.

(c) That the appropriations made by the Congress for 1959, enacted after the Bayne-Jones report was written, involved a much larger increase in medical research and training than the Bayne-Jones group had anticipated, thus complicating the problem of interpreting the fiscal recommendations of the group.

(d) That the applications for the new research projects, apparently of high quality, continue to be submitted to the National Institutes of Health at a rate above that forecast by the Bayne-Jones group.

(e) That consideration needs to be given to some means by which greater security of tenure can be provided to especially competent research investigators than appears to be feasible under the present project grant system.

INSTITUTIONAL OR BASE GRANTS

I might say there, I am referring to the possibility of basic legislation that would enable the National Institutes of Health to make institutional grants or base grants in addition to grants for a specific project.

(f) That payment of full indirect costs of medical research to the institutions which conduct research through project grants is essential to the educational

balance and the fiscal stability of the institutions, and should therefore be provided by the Federal Government.

These, in brief, are the highlights of the conclusions reached from our review.

It is apparent from these facts and conclusions that the National Institutes of Health can reasonably be expected to increase their investment in medical research in accordance with the time and money goals set forth in paragraph (b) above. The immediate question is whether the budget for 1960 should stand as submitted or be given an additional increment toward the long-range goal. While it is evident that additional funds could be used effectively, it is important to bear in mind the following factors:

(1) The NIH budget is \$294,279,000 for 1960 (of which approximately \$215 million is for research and most of the balance for training related to research) is a continuation of the current (1959) appropriation level, and is \$83 million more than the 1958 appropriation level. It is \$111 million more than the 1957 appropriation, and \$196 million more than the 1956 appropriation. Thus, from 1956 through 1959, the NIH appropriations increased by 199 percent. This is a very rapid rate of growth. The current appropriation level is sufficiently high so that an effective research program can be conducted within it.

(2) If the Government wishes to encourage private and philanthropic contributions and State appropriations for medical research, it must not pursue a policy of providing funds for all the new research projects which are developed; there must be a growing sense of responsibility on the part of non-Federal sources of funds for the shared financing of medical research.

(3) The President's budget message for fiscal year 1960 pointed out that " * * * we cannot, of course, undertake to satisfy all proposals for Government spending." The President's budget is a carefully considered financial plan for 1960, and a balanced budget based on a policy of fiscal responsibility. Opening up the budget to any increases at this time will generate additional requests which individually seem small, but in the aggregate would seriously jeopardize the sound overall budget presented by the President.

For these reasons it has been decided that no request will be made to your committee to amend the 1960 budget for NIH. I wish to emphasize, however, that I regard the field of medical research as of very high priority and deserving of broad and increasing national support. I sincerely hope that in 1960 funds from non-Federal sources will continue to increase and thus maintain a good balance between Federal and non-Federal financing of medical research.

Sincerely yours,

ARTHUR S. FLEMMING, *Secretary.*

PROGRAMS OF SCHOOL ASSISTANCE IN FEDERALLY AFFECTED AREAS

For the reasons set out in this letter, I do not recommend adoption by the Congress of the House committee recommendations.

The House committee has recommended an increase of \$44.3 million for the programs of assistance to school districts in federally affected areas over the President's budget. This includes \$22.6 million for school construction and \$21.7 million for operation and maintenance of schools with federally connected pupils. The action of the House committee is consistent with the action of the House of this item in the second supplemental appropriation bill which action was concurred in by the Senate committee.

Mr. Chairman, at the time the President's budget was compiled we did not have this more recent action by the Congress. At that time the Congress had appropriated \$180.8 million for these two programs. This amount was sufficient to finance the highest priority construction projects and 85 percent of entitlement for operation and maintenance.

The 1960 budget continued this same policy and requested the same total amount of money redistributed as between the two programs so as to provide 85 percent of entitlement for operation and maintenance payments and the balance for the highest priority construction projects.

The action of the House committee will provide for full entitlement in both construction and operation and maintenance according to our latest estimates.

However, Mr. Chairman, we have developed a legislative proposal in connection with the programs of school assistance in federally affected areas. This legislation will propose certain restrictions on eligibility similar to the kinds of restrictions proposed by the House Appropriations Committee in its report on our bill.

If this proposed legislation is enacted by the Congress it would probably make the appropriations requested in the President's budget sufficient to pay full entitlements. I recommend, therefore, that no increase over the President's budget for this purpose be made.

OTHER AREAS OF INCREASE

The other areas of increase, Mr. Chairman, involve additions by the House committee totaling \$10 million. I shall not attempt to discuss each of these separately. I shall only say with respect to each of these, as I have said with respect to the items I have already discussed, that although there is merit in the items when each is considered separately, we should forego these increases, in my judgment, in the interest of the larger and more important objective of maintaining a fiscally sound total budget.

REDUCTIONS RECOMMENDED BY HOUSE APPROPRIATIONS COMMITTEE

The House Appropriations Committee recommended a very small number of decreases. They recommended, first, the elimination of an item of \$150,000 for the construction of animal quarters at Hamilton, Mont., an item which, in the light of the overall fiscal situation and our reconsideration of priorities, I shall not ask to have restored.

The second of their recommendations involved the elimination of a request for \$1,785,000 to cover grants for social security training and studies. No reason was given by the House committee for its action. This is an item which I regard as of genuinely high priority.

I am frank to say it is hard for me to understand why the item was eliminated.

Senator CHAVEZ. What about the balanced budget?

Secretary FLEMMING. This was included in the President's budget and I think properly so.

PUBLIC ASSISTANCE GRANTS

Two-thirds of the budget of the Department of Health, Education, and Welfare is for public assistance grants—more than \$2 billion. Over 5.7 million people are expected to receive public assistance in 1960. It is self-evident that if we could find new and better ways to enable people to become self-sustaining citizens, to be contributing members of society, this enormous cost to the Government could be reduced.

Even if we put to better use what we already know, much money could be saved. This request for \$1,785,000—less than one-tenth of 1 percent of public assistance grants—is for these two specific purposes: Finding new methods of helping people to help themselves,

and training more welfare workers to use the best means we already have.

It is hard to think of a more wise and intelligent use of a small amount of Federal dollars than this. I strongly urge your committee to restore these funds.

I think I should also indicate that, as you undoubtedly recall the authority for these expenditures, was contained in the 1956 amendments to the Social Security Act. During the months of November and December I held a series of conferences with representatives of about 800 national organizations that have an interest in the various programs of our department.

As far as the welfare organizations were concerned, this is the one thing that they kept stressing in these conferences—the importance and desirability of obtaining some funds to get these two programs underway.

REDUCTION IN OFFICE OF SECRETARY

The third action of the House committee was to cut in half the small requested increases in two of the appropriations covering the Office of the Secretary. The total of these two reductions, covering salaries and expenses, Office of the Secretary and salaries and expenses, Office of the General Counsel, amounted to \$143,600, of which \$24,300 would be by transfer from trust funds.

Senator HILL. What would those funds go for?

Mr. KELLY. There is an increase of staff proposed. It is due primarily to the enlargement of the Department, covering such areas as the personnel administration of the Department, program analysis operations and security staff and some additions in the general services staff. We will have a complete statement for you on that.

Secretary FLEMMING. I would just like to say, Mr. Chairman, that I feel that the requested increases are consistent with the expansion in the programs for which the Department has responsibility.

RESEARCH IN PUBLIC HEALTH HOSPITALS

The President, in submitting the budget to the Congress, proposed appropriation language which would have this effect: It would make hospitals of the Public Health Service and the Saint Elizabeth Hospital eligible to compete for research grant funds appropriated to the Public Health Service and, particularly, of course, to the National Institutes of Health.

The Public Health Service and the Department feel very strongly that the vast potential for research in these hospitals is represented by the patient load, existing facilities, and available professional staff which should be more effectively utilized.

To enable increased research to be carried out in these hospitals by this method will add a substantial amount to the fund of knowledge now being obtained through other research efforts. Experience elsewhere has shown that a program of research tends to elevate the character and tone of the entire medical care program in a hospital.

By using the existing grant mechanism for this purpose, we can insure the same type of critical professional review and maintain the same high standards of excellence in research done in Public Health Service hospitals and Saint Elizabeths as characterizes the research

program carried out in non-Federal institutions supported by grant funds available to the Public Health Service.

This was one of the first matters that was called to my attention as I started to get acquainted with our field operation. I remember being in the New York office and the doctor in charge of the Staten Island Hospital talking to me about the desirability of their carrying on a research program.

I said "I concur wholeheartedly in your feeling along that line. I assume your people can make application for grants through the National Institutes of Health just as people in other hospitals can." He said, "Your assumption is an incorrect one. Under the existing law we have no authority to do that."

RESEARCH AT SAINT ELIZABETHS HOSPITAL

Senator CHAVEZ. What about Saint Elizabeths?

Secretary FLEMMING. The same thing is true with Saint Elizabeths and it just does not make sense. They cannot go in and compete. I am not asking that they be given preferential treatment, but just be given the same as others.

The proposed language reads:

Appropriations to the Public Health Service available for research grants pursuant to the Public Health Service Act shall also be available, on the same terms and conditions as apply to non-Federal institutions, for research grants to hospitals of the Service or to Saint Elizabeths Hospital.

HOUSE ACTION

Senator HILL. Did the House include that language?

Secretary FLEMMING. No, they did not.

Senator HILL. I will say frankly, I am very strong for that language. I do not see why we should have these hospitals there and they not be eligible to carry on the research as well as any other hospital. The only question I have in my mind would be whether or not that would be considered legislation on the appropriation bill and whether we would have difficulty there.

So far as doing the job is concerned, I am strong for it. I have felt for some time, and I had the same reaction as you did—why should we have these great hospitals? There is Saint Elizabeths, one of the finest mental hospitals in the country, headed by a distinguished man. Why should not this hospital be eligible along with other hospitals?

Is there anything else, Mr. Secretary?

Secretary FLEMMING. That completes my statement and I appreciate very much the opportunity of presenting our views.

Senator HILL. We appreciate very much your appearance here this morning. You know the regard in which we hold you. We realize your situation. You come here as a spokesman for the Department and the Department is part and parcel of the administration.

Your distinguished predecessor was in the same situation, and we held him, Secretary Folsom, in high regard. We know you felt it was your responsibility as long as you are Secretary of the Department of Health, Education, and Welfare to defend the President's policy. You notice I limited what I said to your immediate responsibilities.

Of course, you realize that the House, in its actions, has followed

what we would consider awfully good precedent, following the precedent set by the Senate of which this committee, Senator Chavez, took the lead in setting that precedent.

Each year we have had this problem. We cannot go beyond the budget. As I recall the budget, the first year this administration came in, for hospitals, was \$50 million. I remember we had a tremendous fight raising that figure of \$50 million. We had a big fight on the floor of the Senate, but we did raise it.

Then, the interesting thing was that, although that budget was just so small, the administration recommended that the authorization for hospitals be increased some \$60 million by putting in the four new categories with which you are familiar.

The administration put much stock on this legislation, increasing this legislation. The authorization under the original act was \$150 million and then, with the amendments suggested by the administration, that raised the authorization to \$210 million. Yet, in all the years that have come and gone since then, not one single time have we had a budget estimate for hospitals really up to the \$150 million. It has always been less than the \$150 million.

Senator CHAVEZ. You never appropriate as little as the Department says you should.

Senator HILL. You will recall last year we put in the full authorized amount of \$210 million and then, when we went to the conferees of the House, we finally had to come out with \$185 million.

I am saying that, so far as the administration's budget is concerned, they never even reached a budget estimate as I recall, I am sure, of the \$150 million. Am I right about that, Mr. Kelly?

IMPORTANCE OF RESEARCH ON CANCER AND MENTAL ILLNESS

Senator CHAVEZ. I will go a little stronger than the chairman of the committee. I do not see, in dealing with human beings, where you can worry about a balanced budget when you are dealing with a mental illness or cancer. We have a vivid example before us now. Possibly, if we had done a little more research on cancer, Secretary Dulles would not be in the position he is in.

If we had done a little more research on mental illness, we might have rehabilitated someone over here in St. Elizabeths. Instead of having a public charge, you might have a producer who would not be a public charge and would be a taxpayer.

If you did a little more research on the physically ill, instead of having them as a public charge, you might be able to have them doing something so they could earn a living and they would not be a public charge. I cannot see any reason for worrying about a dollar when a man is mentally ill.

MENTAL ILLNESS PATIENTS

Senator HILL. Over one-half of all the hospital beds in the United States today are occupied by people suffering from some form of mental illness. For every 2 minutes that we have been sitting in this room this morning a man, woman, or child in these United States has died a tortured or agonizing death from cancer. We know that heart and circulatory diseases kill more people than all of the other diseases together. I respect the Secretary's position, of course,

but had we followed the budgets, which we have not done, I am glad to say, we would not have done anything like we have in the field of health during the last 6 years.

TOTAL RESEARCH APPLICATIONS

This budget requires only \$20 million for the research facilities, the physical facilities for research. The act itself authorizes \$30 million. We have not yet gone into the details on this, but in the evidence last year we were shown that we had applications for at least three or four times the amount of the \$30 million, and these funds have to be matched dollar for dollar.

In other words, they just illustrate that there will be non-Federal funds that will go into these great programs with the Federal funds.

I might say this: I was in Philadelphia about 2 weeks ago, and I had the pleasure of being there with the Surgeon General. He and I spoke on the same program. After we spoke that morning, I went out and visited the laboratories of Smith, Kline and French, one of our leading pharmaceutical houses, and I must say I was very much impressed by what they were doing.

I do not think the fact that the Government is doing what it is and what it proposes to do in this matter of medical research has in any way deterred them. They are carrying on some of the most interesting experiments.

One of the most interesting experiments I saw was in the psychopharmacology division. I just picked that out because I happened to be there about 2 weeks ago and saw their work.

Senator CHAVEZ. If a man is suffering from a heart ailment, the doctor says, "You stay in bed and keep quiet." The man who has cancer might complain about the pain and so forth, but the mentally ill cannot take care of himself. It is pathetic.

INCREASE IN CANCER CASES

Senator HILL. The testimony before the Senate Committee on Labor and Welfare on our international medical research bill shows that the incidence of cancer is on the increase in 33 countries. It may be that we have better methods of diagnosing, but there is definitely that increase.

As I said, I respect you, sir, and your position, and then I might say another thing, too, and that is we are delighted to have you here and we welcome you, but I think under the Constitution, after all, the basic responsibility in this matter is in the Congress, because the Congress is that body under our system which can and can, alone, appropriate funds out of the Treasury.

Secretary FLEMMING. I certainly concur, Mr. Chairman.

PERCENTAGE OF TOTAL BUDGET

Senator HILL. I recognize that and what we are really speaking about is a very small amount of money in relation to this overall budget.

The budget is \$77 billion. The House went \$181.4 million over budget estimates of the budget of \$77 billion.

Mr. Kelly, you are supposed to be a wizard at figures. What percent of \$77 billion is \$181.4 million?

Mr. KELLY. A little over two-tenths of 1 percent.

Senator HILL. You are familiar with our history on the NIH. Year after year we have had these budget estimates and this committee, supported by the Senate, has gone beyond the budget estimates and I have never heard of one soul who ever after the appropriation was made, came in and said, "Well we went too far. We should not have done this or that."

On the other hand, I think these programs have really worked out very well and we are really making progress.

OPERATIONS AT NATIONAL INSTITUTES OF HEALTH

Secretary FLEMMING. I would like to say this, and I think I should say it in fairness to the NIH operation, this is one of the areas with which I have tried to become acquainted during the last several months. I have gone out and met with the study groups that pass initially on the applications that are filed for research grants. I have also met with many of the advisory councils that make the final recommendations, and I can say to you that I am convinced of the fact that these applications are evaluated very thoroughly by both the study groups and the advisory council, both from the standpoint of the merits of the proposed project and also from the standpoint of the persons who propose to carry on these projects.

I am convinced that when a project is recommended to the Surgeon General for approval that it has gone through a screening process that assures the American people of the fact that their money is being spent effectively.

PERSONNEL AT NATIONAL INSTITUTES OF HEALTH

Senator CHAVEZ. They have very fine personnel.

Senator HILL. We have some of the most distinguished doctors, scientists, and lay people, too, who not only appear before this committee but who have appeared before the legislative committee, all of whom have confirmed just exactly what you have said.

Although every year we have had this battle with the budget so to speak, and have gone beyond the budget estimates, I have yet to find one complaint, responsible or irresponsible, that too much money was appropriated so far as this health service was concerned.

STATEMENT BY DR. SHANNON

I find in the House hearings on the present bill this statement by Dr. Shannon, who is head of the NIH, as we know. He is Director of the Institutes.

As a result of this, there was a draft budget amendment prepared by NIH, transmitted to PHS and from there to HEW on the 3d of February reporting that \$351,253,000 could be effectively expended and would be a very sound budget proposal for 1960.

I must say that that statement is very gratifying because in the past this committee has had to act without such support from the NIH. We have had to assume responsibility but we have had some splendid witnesses, of course—taxpayers from the outside.

Senator CHAVEZ. The taxpayers come in here on their own; they are not subpoenaed.

Senator HILL. I think if any of us had a sickness of our own in our family we would be looking for those types of doctors.

I appreciate your position, Mr. Secretary, and I certainly have no desire to embarrass you in any way, but we have a 6-year record on this.

This committee has, as I say, set the precedent and it is very happy to find that the House is certainly to some extent at least, following the precedent.

Senator CHAVEZ. I agree with you.

DEPENDENTS MEDICAL CARE

Senator HILL. Mr. Secretary, a question came up earlier about the denial of funds for dependents medical care. May I ask if you want to express any particular thought on that or are you prepared to make any further recommendations?

Mr. KELLY. Yes, Mr. Chairman. I have spent some very considerable time on this. I am sorry to say that I cannot report to you that we have some new method of arriving at the answer. The history of this item is that the Congress enacted legislation in 1957 that authorized the dependents of the uniformed services to obtain medical care primarily at Government expense and that included among these services was the Public Health Service that has responsibility for the Coast Guard, and the commissioned officers of the Coast and Geodetic Survey and the Public Health Service.

The method of operation of the law is that the Surgeon General's office of the Army is made the agent for the administration of this program, but the funds related to the dependents of the Public Health Service are made available to the Public Health Service and we reimburse the agent for the expenditures which are incurred.

It is unlike any other program we run in that we do not have an exercise of control over those limited funds. All we can do is estimate in advance how many such patients we think there will be and how much it will cost and to the extent we find we are wrong, come back to you.

The Congress was quite critical last year of the operation of this program in that they thought there was an excessive amount of care given in contract facilities and that they were not utilizing existing Federal facilities.

1958 REGULATIONS

As a result of that criticism last October 1, the joint regulations of the Department of Defense and Department of Health, Education, and Welfare were revised to put a greater emphasis on the use of the Federal facilities.

The nature of these changes in regulations, however, have a delayed effect because some people had already arranged for the use of private doctors in connection with maternity care and they were permitted to go ahead but new maternity cases had to first see if there was available space in Federal hospitals.

The Public Health Service has very few hospitals and has only two that offer maternity care, so to the extent that it utilizes other

facilities it depends upon the military facilities for this, and for this reason I think the Public Health Service employees have a higher percentage of contract care than is true in other instances.

We have been searching for a means whereby we can exercise greater control over the admission of patients to hospitals and greater control over the funds you make available to us for this purpose. We find it difficult to divorce ourselves from the military system inasmuch as we represented only 2 percent of the total cost involved in this system.

NEED FOR SYSTEM OF CONTROLS

We are still consulting among ourselves with the Bureau of the Budget and with the Department of Defense to see if we can work out some more adequate system of controls because we are embarrassed to have an appropriation made to us over which we are not making the obligations and adequately controlling the fund, but the nature of the basic legislation makes it quite difficult to do so.

Frankly, I personally wish the funds were appropriated to the Department of Defense for our dependents instead of to us.

Senator HILL. But you have given the matter your attention at this time and you are trying to work it out, are you not?

Mr. KELLY. Yes, sir.

QUARTERS FOR FOOD AND DRUG ADMINISTRATION

Senator HILL. I would like to ask you about the quarters for the Food and Drug Administration. I believe you have a lease agreement for those quarters that has been held up by the GSA.

Mr. KELLY. The bids were opened and a satisfactory arrangement has been made to develop a facility for the Food and Drug Administration. It is pending before the General Services Administration and we have been informed that we can expect them to execute that lease quite shortly.

Secretary FLEMMING. I checked with them personally on that, Mr. Chairman.

Senator HILL. You expect the lease shortly then?

Secretary FLEMMING. That is right.

Senator HILL. What about the establishment of a new regional Food and Drug Administration office in Dallas?

Mr. KELLY. The General Services Administration has advertised bids to obtain space and we are waiting for those to come in and be opened. We are proceeding with the acquisition of the equipment so that as soon as the building will be ready, we will be ready to use it.

Senator HILL. Is there anything you would like to add, Mr. Secretary?

QUESTION OF PRESENT MEDICAL RESEARCH EXPENDITURE

Secretary FLEMMING. I would just like to say that I appreciate the consideration that you have given to my testimony, and I think that our basic approach within the Administration is reflected in my letter to Congressman Fogarty which I made a part of my testimony. As I indicated there, we have studied this situation very carefully, particularly on the medical research side. There is no doubt in our minds

that an ultimate goal of \$350 million expenditures per year for research is a good goal.

I am not talking about the total goal but the expenditure for medical research. As you know, at the present time, that is running about \$215 million. We think that we should move toward that goal of \$350 million, but I explained in that letter the overall fiscal situation as the President sees it at the present time and that accounts for the fact that we did not ask for an amendment.

It does not run to the merits of the program themselves, as I think my testimony makes clear.

Senator HILL. On the merit, the programs are awfully good.

Secretary FLEMMING. That is right; they are doing a very good job.

Senator HILL. They are doing a fine job and, as we have given them these additional funds, they have kept their high standards and continued to get the fine results.

Secretary FLEMMING. I think they have done a good job this year.

Senator HILL. As I say, we hold you in great respect and we fully understand your situation.

Secretary FLEMMING. I look forward to working with you and the other members of the committee on this matter.

Senator HILL. Thank you, sir, and we will continue to do that.

Is there anything further you would like to add, Secretary Richardson?

Mr. RICHARDSON. No, sir.

Senator HILL. We certainly want to thank you. We appreciate it very, very much.

COMMITTEE RECESS

The subcommittee will recess at this point.

(Whereupon, at 11:10 a.m., Wednesday, April 29, 1959, the hearing was recessed, to reconvene at 10 a.m., Monday, May 4, 1959.)

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION,
AND WELFARE APPROPRIATIONS FOR 1960

MONDAY, MAY 4, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room F-82, the Capitol, Hon. Lister Hill, chairman of the subcommittee, presiding.

Present: Senators Hill, Monroney, and Byrd.

DEPARTMENT OF HEALTH, EDUCATION, AND
WELFARE

AMERICAN PRINTING HOUSE FOR THE BLIND

STATEMENT OF JAMES F. KELLY, DEPARTMENT BUDGET OFFICER,
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

APPROPRIATION ESTIMATE

"For carrying out the Act of March 3, 1879, as amended (20 U.S.C. 101-105), \$400,000."

Amounts available for obligation

	1959 appro- piation	1960 budget estimate	1960 House allowance
Appropriation.....	\$400,000	\$400,000	\$400,000

Obligations by activity

	1959 appro- piation	1960 budget estimate	1960 House allowance
Grants for educational materials (total obligations).....	\$400,000	\$400,000	\$400,000

Obligations by object

	1959 appro- piation	1960 budget estimate	1960 House allowance
Grants, subsidies, and contributions.....	\$400,000	\$400,000	\$400,000

Summary of changes

	Positions	Amount
1959 actual appropriation.....		\$400,000
Deduct nonrecurring items.....		
1960 base.....		400,000
1960 appropriation request.....		400,000
Net change requested.....		0

	1960 budget estimate	1960 House allowance
Decreases for program items: Decrease in per capita rate of 1,298 for base of 12,024 pupils.....	\$15,610	\$15,610
Total decreases.....	15,610	15,610
Increases for program items: Increase of 476 in number of blind pupils at a per capita rate of \$32.80.....	15,610	15,610
Total increases.....	15,610	15,610
Total change requested.....	0	0

Registrations of blind pupils in the United States as of first Monday in January

States	Actual, fiscal year 1958	Actual, fiscal year 1959	Estimated, fiscal year 1960
Alabama.....	181	216	229
Alaska.....			
Arizona.....	60	76	113
Arkansas.....	180	177	175
California.....	770	944	1, 113
Colorado.....	99	124	138
Connecticut.....	238	276	320
Delaware.....	36	42	41
Florida.....	360	325	391
Georgia.....	289	316	347
Idaho.....	32	26	26
Illinois.....	523	644	683
Indiana.....	228	209	236
Iowa.....	138	135	146
Kansas.....	136	119	153
Kentucky.....	170	142	174
Louisiana.....	175	200	237
Maine.....	22	27	27
Maryland.....	225	237	278
Massachusetts.....	589	594	¹ 651
Michigan.....	458	568	614
Minnesota.....	268	207	249
Mississippi.....	135	133	150
Missouri.....	212	227	220
Montana.....	75	45	54
Nebraska.....	83	75	86
Nevada.....	1	4	16
New Hampshire.....	45	31	42
New Jersey.....	339	425	490
New Mexico.....	114	101	107
New York.....	1, 134	1, 301	1, 437
North Carolina.....	390	409	428
North Dakota.....	30	24	31
Ohio.....	655	652	729
Oklahoma.....	79	73	92
Oregon.....	150	165	190
Pennsylvania.....	738	892	972
Rhode Island.....	2	19	38
South Carolina.....	126	128	141
South Dakota.....	41	44	47
Tennessee.....	249	239	268
Texas.....	371	376	442
Utah.....	43	42	¹ 49
Vermont.....	25	12	15
Virginia.....	293	253	259
Washington.....	132	217	246
West Virginia.....	126	131	154
Wisconsin.....	215	223	249
Wyoming.....	11	14	21
District of Columbia.....	44	31	28
Hawaii.....	59	53	60
Puerto Rico.....	79	81	87
American Samoa.....			
Canal Zone.....			3
Guam.....			
Virgin Islands.....	10		
Total.....	11, 183	12, 024	13, 492

¹ Not necessarily final figures.

GENERAL STATEMENT

Senator HILL. The committee will kindly come to order.

We will hear from the American Printing House for the Blind.

Are you going to present that, Mr. Kelly?

Mr. KELLY. Yes, Mr. Chairman.

If I may, I would like to file on behalf of Mr. Davis, the Superintendent of the American Printing House for the Blind, his opening statement, and summarize the statement.

BUDGET REQUEST

The budget request is for \$400,000 and is the maximum authorized under the law to be used for the provision of books and materials for the education of the blind.

In addition to this appropriation, there is a \$10,000 permanent appropriation for this purpose.

This year's request is for the full authorization, the same as last year's appropriation, and will be divided among the blind school population estimated at 13,492, which is 1,468 more than the current year.

Thus, the per capita rate will decline from \$34.10 in 1959, to \$30.39 in 1960.

Senator HILL. Then it would require appropriation of \$50,000 more than your estimate to provide the same per capita rate in 1960, would it not?

Mr. KELLY. I believe that is correct, sir.

The appropriation requested was allowed by the House.

Senator HILL. All right.

Thank you, sir. Thank you very much, Mr. Kelly.

(The statement referred to follows.)

STATEMENT OF SUPERINTENDENT, AMERICAN PRINTING HOUSE FOR THE BLIND

The American Printing House for the Blind is a nonprofit educational institution, founded in 1858, and located in Louisville, Ky. Each year, the printing house receives Federal appropriations to be used to provide free Braille textbooks and other educational materials needed for the education of the Nation's blind children. Congress first appropriated funds for this purpose in 1879.

The printing house serves two groups of blind schoolchildren. Educational materials are provided (1) to students who attend special schools and classes for the blind and (2) to blind students who attend regular public schools and classes. This latter group of students was brought within the program of the printing house by the enactment of Public Law 922 in the 84th session of Congress.

The funds appropriated are utilized by the printing house solely for the payment of the production costs of books and apparatus for the blind. No part of them is used for such items as heat, electricity, maintenance, purchase of equipment, or construction or leasing of buildings. The full amount of the appropriation is credited to the public schools for the blind and the chief State school officers, apportioned on the basis of the number of blind children registered on the first Monday in January of each year.

1960 BUDGET ESTIMATE

The 1960 budget estimate of \$400,000 is the same as the appropriation for fiscal year 1959. It is the maximum permitted by the current authorizing legislation (Public Law 922, 84th Cong.).

The materials provided by the 1960 appropriation will be distributed on the basis of an estimated school population of blind children of 12,500, an increase of 476 over 1959. The apportionment of the appropriation among the increased population of blind schoolchildren will entail a decrease in the per capita amount and therefore a decrease in the number of textbooks and educational materials available to each blind student, when compared with 1959. In addition there is a permanent appropriation of \$10,000 available for the purposes of this act.

FACTORS UNDERLYING THE APPROPRIATION REQUEST

The 1960 appropriation request is based on the following factors: (1) the anticipated increase in enrollments of blind students; (2) the production cost of manufacturing materials for them; (3) the amount of material required for each blind pupil; and (4) the limitation imposed by the authorizing legislation.

INCREASED ENROLLMENT

The number of blind children who are being educated in regular public schools, as well as those in special schools and classes for the blind, is increasing each year. The increase is due primarily to the increase in the school population as a whole at the primary and elementary levels. The 1960 appropriation will be divided among a population of eligible blind schoolchildren of 12,500, about 476 more than in 1959.

INCREASED PRODUCTION COSTS

Although the centralized facilities of the printing house permit it to achieve many economies of production, the highly specialized methods employed in the embossing of books for the blind and in the manufacture of other apparatus and materials for their instruction, coupled with the relatively small numbers of the blind, result in high unit costs. In addition, increases in the national minimum wage and the cost of raw materials since 1956 have raised the cost of books and materials for the blind, so that in 1960 a per capita rate of \$40 would be necessary to supply the same minimum amount of material as was provided by the rate of \$31.12 per pupil in 1956. The appropriation for 1959 permitted a rate of \$34.10 per pupil, and the appropriation here requested will provide a rate of \$32.80 per pupil in 1960.

NEED FOR A VARIETY OF TEXTS AND SUPPLEMENTARY MATERIALS

In addition to the impact of the large increase in our blind school population (after a 20-year gradual decline) there have been far-reaching developments in educational trends in the past few years, principally in the increase in the number of blind children being educated in public schools for the seeing, either in special classes for the blind or as single placements in local school systems. As of January 1958, official registration figures show that 45 percent of the total blind school population is now attending public schools. Of a total of 12,024 blind pupils, 5,399 were in public schools and 6,625 were in schools for the blind. So long as the education of blind children was limited largely to centralized schools for the blind in each State, it was fairly easy to serve large numbers of children with a minimum choice of basic texts. However, because of the wide variety of textbooks used in public school systems throughout the country, too often the basic curriculum of texts in the printing house catalogs does not conform to the requirements of individual public schools.

The provision of a much wider selection of basic texts in printing house catalogs will of necessity reduce the total sales for individual titles, and thus increase unit costs.

The need of blind children for educational materials beyond the skeleton curriculum of textbooks is widely recognized, and is emphasized by the increasing attendance of blind children in regular public school classes. The printing house has the skills and facilities to develop and manufacture many new types of educational materials which would be of inestimable value, particularly special aids, such as scale models for individual handling by the children, embossed drawings for the study of biology, new manuals for teaching Braille music and mathematics notations, Braille textbooks interlined with the same wording in ink print, so that the single blind child in a public school class can have the help of his teacher who does not know Braille, and so on. The printing house is constantly

carrying on developmental work of this nature in its educational and technical research facilities. However, if all of the available funds must be used to supply basic textbooks and the absolute minimum of basic aids, nothing is left for enrichment of curriculum. In the case of blind children, these supplementary materials are particularly important if we are to hope to give them an education comparable to that provided in the usual public school class for seeing children and avoid the mere verbal repetition of texts without the real understanding which the eye so easily provides.

In the light of the above considerations, it is respectfully requested that the annual appropriation for the American Printing House for the Blind be granted in the amount of \$400,000.

FOOD AND DRUG ADMINISTRATION

STATEMENT OF GEORGE P. LARRICK, COMMISSIONER; ACCOMPANIED BY JOHN L. HARVEY, DEPUTY COMMISSIONER; LEO L. MILLER, EXECUTIVE OFFICER; JAMES B. CARDWELL, FINANCIAL MANAGEMENT OFFICER; SHELBY T. GREY, DIRECTOR, PROGRAM PLANNING AND APPRAISAL; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

SALARIES AND EXPENSES

“For necessary expenses not otherwise provided for, of the Food and Drug Administration, including purchase of not to exceed twenty-five passenger motor vehicles for replacement only; reporting and illustrating the results of investigations; purchase of chemicals, apparatus, and scientific equipment; payment in advance for special tests and analyses by contract; and payment of fees, travel, and per diem, in connection with studies of new developments pertinent to food and drug enforcement operations; **[\$9,800,000]** *\$11,800,000.*”

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate (total available for obligation)-----	\$10, 950, 000	\$11, 800, 000	\$13, 800, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Field inspections, investigations, and labora- tory analyses-----	870	\$7, 265, 900	954	\$7, 614, 600	1, 082	\$8, 594, 800
2. Research and methodology-----	218	1, 945, 800	242	2, 216, 100	293	2, 921, 800
3. Compliance, consultation, and education-----	64	548, 600	75	632, 700	84	751, 900
4. Medical evaluation-----	57	573, 400	61	626, 100	73	772, 300
5. Executive direction-----	103	616, 300	115	710, 500	128	759, 200
Total obligations-----	1, 312	10, 950, 000	1, 447	11, 800, 000	1, 660	13, 800, 000

Obligations by objects

	1959 estimate		1960 estimate		1960 House allowance	
Total number of permanent positions.....	1,312		1,447		1,660	
Full-time equivalent of all other positions.....	6		6		6	
Average number of all employees.....	1,225		1,376		1,535	
Number of employees at end of year.....	1,288		1,428		1,652	
Average GS grade and salary.....	7.8	\$5,841	8.2	\$6,615	8.3	\$6,593
01 Personal services:						
Permanent positions.....	\$8,002,300		\$8,863,600		\$9,800,600	
Positions other than permanent.....	38,000		38,000		38,000	
Other personal services.....	50,000		79,000		79,000	
Total personal services.....	8,090,300		8,980,600		9,917,600	
02 Travel.....	449,500		538,000		585,100	
03 Transportation of things.....	85,800		77,200		90,100	
04 Communication services.....	115,700		121,900		132,600	
05 Rents and utility services.....	1,800		1,800		1,800	
06 Printing and reproduction.....	60,600		67,400		67,300	
07 Other contractual services.....	184,500		209,100		286,700	
Services performed by other agencies.....	87,000		54,000		65,400	
08 Supplies and materials.....	322,100		351,600		456,400	
Samples.....	118,400		123,500		138,400	
09 Equipment.....	913,300		697,800		1,422,000	
11 Grants, subsidies, and contributions: Contribution to civil service retirement fund.....	515,800		571,900		631,400	
13 Refunds, awards, and indemnities.....	3,000		3,000		3,000	
15 Taxes and assessments.....	2,200		2,200		2,200	
09 1958 obligation for 1959 programs.....	-5,813					
Total obligations.....	10,944,187		11,800,000		13,800,000	

Summary of changes

	Positions	Amount
1959 actual appropriation.....	1,251	\$9,800,000
1959 supplemental appropriation.....	61	1,150,000
Total appropriation.....	1,312	10,950,000
Deduct nonrecurring costs.....		928,600
Revised 1959 base.....	1,312	10,021,400
1960 appropriation request.....	1,447	11,800,000
Net change requested.....	+135	+1,778,600

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases for mandatory items:				
Annualization of 131 new positions authorized in 1959 for part of year		\$283, 200		\$283, 200
Extra day of pay (261 days in 1959 and 262 days in 1960)		32, 800		32, 800
Subtotal		316, 000		316, 000
Increases for program items:				
Increase to provide initial staffing and further equipment for the new Dallas district office—scheduled to be opened in 1960	50	267, 000	70	351, 800
Increased field inspection travel to rise level from current average of 74 days per inspector to 84 days		51, 500		51, 500
Auto rental, conversion to GSA motor pool		11, 700		11, 700
Increase to refurbish selected district offices		113, 800		377, 600
Special items of modern equipment to bring 10 districts up to the Detroit prototype		122, 600		122, 600
Replacement of 25 motor vehicles among existing fleet		37, 500		37, 500
Research—special study to investigate bacterial contamination in frozen foods	5	35, 700	6	47, 500
Increase to provide additional research in food standards and cosmetics	4	33, 400	4	18, 200
Increases to strengthen medical evaluation	4	46, 600	13	139, 300
Increase to strengthen compliance, regulatory, information, and education activities	5	31, 700	16	150, 900
Increases for improved administrative management and program planning	7	37, 200	18	85, 900
Increase to replace obsolete equipment		193, 100		193, 100
Increase for further implementation of the food additives amendment:				
Costs related to 34 field positions		\$222, 900		
Costs related to 26 departmental positions		257, 900		
	60	480, 800	60	480, 800
Staffing, operating expenses and equipment for Atlanta			36	170, 400
Staff and operating expenses for other districts			72	461, 200
Specific research projects:				
To detect and identify pesticide residues			19	169, 400
To determine effect of radioactivity on foods and drugs			15	230, 500
To investigate presence of carcinogens in container waxes			8	114, 200
To study presence of toxic properties in fatty acids			6	114, 500
To develop methods of analysis for adrenal cortex hormones			2	17, 500
Strengthen medical activities—to study adverse effects of new drugs after they are in use			3	53, 500
Total change requested	135	1, 778, 600	348	3, 778, 600

New positions requested

	Grade	Annual salary
Field inspections, investigations, and laboratory analysis:		
Chief of district.....	GS-14.....	\$11,355
Assistant chief of district.....	GS-13.....	9,890
Chief chemist.....	GS-13.....	10,130
Chief inspector.....	GS-13.....	9,890
Food and drug officer.....	GS-12.....	8,330
Chemist.....	GS-12.....	8,810
Inspector.....	GS-12.....	8,330
4 chemists.....	GS-11.....	30,040
4 inspectors.....	GS-11.....	28,120
Bacteriologist.....	GS-11.....	7,030
16 chemists.....	GS-9.....	100,560
31 inspectors.....	GS-9.....	185,535
Clerk.....	GS-7.....	4,980
Do.....	GS-6.....	4,490
10 clerks.....	GS-5.....	40,400
5 clerks.....	GS-4.....	18,775
Laboratory aid.....	GS-4.....	3,755
Storekeeper.....	GS-3.....	3,495
2 laboratory aids.....	GS-2.....	6,510
Total (84).....		500,425
Research and methodology:		
Bacteriologist.....	GS-13.....	9,890
2 chemists.....	GS-12.....	17,620
Pharmacologist.....	GS-12.....	8,810
5 chemists.....	GS-11.....	37,550
2 pharmacologists.....	GS-11.....	15,020
2 physicians.....	GS-11.....	15,020
Bacteriologist.....	GS-11.....	7,030
Microanalyst.....	GS-11.....	7,030
2 chemists.....	GS-9.....	12,570
Bacteriologist.....	GS-9.....	5,985
Do.....	GS-7.....	4,980
2 clerks.....	GS-4.....	7,510
Laboratory aid.....	GS-3.....	3,495
2 laboratory aid.....	GS-2.....	6,510
Total (24).....		159,020
Compliance, consultation, and education:		
2 food and drug officers.....	GS-14.....	22,710
Do.....	GS-12.....	16,660
Food and drug officer.....	GS-11.....	7,030
Information specialist.....	GS-11.....	7,030
Administrative analyst.....	GS-9.....	5,985
Administrative assistant.....	GS-7.....	4,980
2 clerks.....	GS-5.....	8,080
Clerk.....	GS-3.....	3,495
Total (11).....		75,970
Medical evaluation:		
Medical officer.....	GS-14.....	11,595
2 food and drug officers.....	GS-13.....	19,780
Clerk.....	GS-5.....	4,040
Total (4).....		35,415
Executive direction:		
Food and drug officer.....	GS-12.....	8,330
Real property management officer.....	GS-12.....	8,330
Position classifier.....	GS-11.....	7,030
Accountant.....	GS-9.....	5,985
Management analyst.....	GS-7.....	4,980
3 clerks.....	GS-5.....	12,120
3 clerk-typists.....	GS-4.....	11,265
Labor supervisor.....	GS-3.....	3,495
Total (12).....		61,535
Total, new positions, all activities (135).....		832,365

EFFECT OF HOUSE ACTION

As you know, Mr. Chairman, the House Committee on Appropriations, in acting on the appropriations for the Department of Health, Education, and Welfare for 1960, increased the President's budget by \$2 million for the Food and Drug Administration. As the Secretary has already indicated, this increase is contrary to the fiscal policy of the President. In response to a request by this committee, however, I would like to submit the following brief explanation of how this increase, if enacted, would be applied:

	Positions	Amount
1. To staff our Atlanta and Dallas district offices at a level of 80 positions each—a level for which the new facilities in those cities are being constructed to accommodate.....	56	\$255, 200
2. To modernize our Boston and Buffalo district offices.....		263, 800
3. To provide a higher level of enforcement in the field.....	72	461, 200
4. To advance our research efforts in the following areas:		
Detect and identify pesticide residues on foods.....	19	169, 400
Determine the effects of radioactivity on foods and drugs.....	15	230, 500
Investigate the presence of carcinogens on container waxes.....	8	114, 200
Study the presence of toxic properties in reheated fats.....	6	114, 500
Develop methods of analysis for adrenal and cortex hormones.....	2	17, 500
Investigate the bacterial contamination of frozen foods.....	1	11, 800
Provide additional effort in food standards and cosmetics.....	0	47, 800
Total.....	51	705, 700
5. To reduce the backlog in applications for new drug approvals.....	5	49, 100
6. To establish a contractual system with hospitals and clinics permitting FDA to follow up on unanticipated adverse reactions to new drugs.....	3	53, 500
7. To test suspected quack products in clinics and hospitals in order to develop sufficient evidence to support court action.....	4	43, 600
8. To improve FDA's educational, regulatory, and administrative activities.....	22	167, 900

As stated by the Secretary when he appeared before the committee, such an increase in the opinion of the executive branch of the Government would further contribute to inflation and weakening of the national economy. The Department has recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

In concluding, I would like to emphasize our desire to make available any additional data which the committee might require in its review of the budget. I shall also be glad to answer any questions which the committee may wish to ask.

Thank you.

APPROPRIATION ESTIMATE

"SALARIES AND EXPENSES, CERTIFICATION, INSPECTION, AND OTHER SERVICES

"For expenses necessary for the certification or inspection of certain products, and for the establishment of tolerances for pesticides, in accordance with sections 406, 408, 504, 506, 507, 604, 702A, and 706 of the Federal Food, Drug, and Cosmetic Act, as amended (21 U.S.C. 346, 346a, 354, 356, 357, 364, 372a, and 376), the aggregate of the advance deposits during the current fiscal year to cover payments of fees for services in connection with such certifications, inspections, or establishment of tolerances, to remain available until expended. The total amount herein appropriated shall be available for purchase of chemicals, apparatus, and scientific equipment; expenses of advisory committees; and the refund of advance deposits for which no service has been rendered."

Amounts available for obligation

	1959 appro- piation	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$1, 380, 000	\$1, 410, 000	\$1, 410, 000
Prior year balance available.....	446, 290	446, 290	446, 290
Total available for obligation.....	1, 826, 290	1, 856, 290	1, 856, 290
Balance available in subsequent year.....	446, 290	446, 290	446, 290
Obligations incurred.....	1, 380, 000	1, 410, 000	1, 410, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Certification services.....	157	\$1, 334, 000	157	\$1, 362, 000	157	\$1, 362, 000
2. Pesticides tolerances.....	4	42, 000	4	43, 000	4	43, 000
3. Refunds.....		4, 000		5, 000		5, 000
Total obligations.....	161	1, 380, 000	161	1, 410, 000	161	1, 410, 000

Obligations by objects

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Total number of permanent positions.....	161	161	161
Full-time equivalent of all other positions.....	1	1	1
Average number of all employees.....	158	158	158
Number of employees at end of year.....	161	161	161
Average salaries and grades:			
General schedule grades:			
Average salary.....	\$6, 325	\$6, 474	\$6, 474
Average grade.....	GS-7.8	GS-8.0	GS-8.0
01 Personal services:			
Permanent positions.....	\$963, 200	\$964, 200	\$964, 200
Positions other than permanent.....	5, 300	6, 000	6, 000
Other personal services.....	33, 500	37, 000	37, 000
Total personal services.....	1, 002, 000	1, 007, 200	1, 007, 200
02 Travel.....	20, 000	19, 600	19, 600
03 Transportation of things.....	10, 000	10, 200	10, 200
04 Communication services.....	4, 000	4, 800	4, 800
05 Rents and utility services.....		100	100
06 Printing and reproduction.....	8, 000	7, 900	7, 900
07 Other contractual services.....	12, 000	32, 000	32, 000
Services performed by other agencies.....	48, 000	48, 000	48, 000
08 Supplies and materials.....	144, 000	144, 300	144, 300
09 Equipment.....	62, 000	63, 800	63, 800
11 Grants, subsidies, and contributions: Contribution to retirement fund.....	65, 000	65, 100	65, 100
13 Refunds, awards, and indemnities.....	4, 000	5, 000	5, 000
15 Taxes and assessments.....	1, 000	2, 000	2, 000
Total obligations.....	1, 380, 000	1, 410, 000	1, 410, 000

Summary of changes

	Positions	Amount
1959 estimated appropriation.....	161	\$1, 380, 000
Total appropriation.....	161	1, 380, 000
Revised 1959 base.....	161	1, 380, 000
1960 appropriation request.....	161	1, 410, 000
Net change requested.....		+30, 000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases:				
For mandatory items:				
Increase for exempt positions.....		\$1, 000		\$1, 000
Increase for retirement contributions.....		100		100
Subtotal.....		1, 100		1, 100
Extra day of pay (261 days in 1959 and 262 days in 1960).....		3, 500		3, 500
Subtotal.....		4, 600		4, 600
For program items, certification services:				
Increase in temporary employment.....		200		200
Postal rate increase.....		800		800
Other contractual services.....		19, 600		19, 600
Equipment.....		1, 800		1, 800
Other objects of expense.....		1, 100		1, 100
Subtotal.....		23, 500		23, 500
For pesticides tolerances:				
Increase in temporary employment.....		500		500
Other contractual services.....		400		400
Subtotal.....		900		900
For refunds: Anticipated refunds.....		1, 000		1, 000
Subtotal, program items.....		25, 400		25, 400
Total change requested.....		30, 000		30, 000

PREPARED STATEMENT

Senator HILL. Now, Mr. Larrick, we will be happy to hear from you.

Mr. LARRICK. Good morning, Senator.

Senator HILL. It is good to have you gentlemen here. We will put your statement in the record in full and have you proceed in your own way.

(The statement referred to follows:)

STATEMENT OF COMMISSIONER OF FOOD AND DRUGS ON SALARIES AND EXPENSES,
FOOD AND DRUG ADMINISTRATION

Mr. Chairman and members of the committee, once again it is our pleasure to appear before this committee to present the Food and Drug Administration budget for fiscal year 1960. Before doing so, we would like to express our sincere appreciation for the thoughtful consideration given in the past to the problems of our agency.

SUMMARY OF 1960 BUDGET

The budget which we are presenting today calls for total new obligational authority of \$11,800,000, a net increase of \$850,000 over the budget proposed for the current fiscal year. This increase will provide additional resources to improve the basic operations of FDA, plus funds to administer the food addi-

tives amendment passed during the closing days of the 85th Congress. Last week's House action would have the effect of increasing FDA's 1960 budget by \$2 million. I would like to reserve comment on this matter until later in my presentation.

Before going into details of the budget, however, we would first like to present a brief explanation of our organization—what we do and why. At the same time, we would like to share with you some of our more recent experiences and problems.

MISSION AND PROGRAMS

The primary mission of FDA is to protect the consumer against harmful, insanitary, misleading, or falsely labeled foods, drugs, cosmetics, and therapeutic devices.

To carry out this mission, FDA—

- Makes periodic inspections of plants engaged in the manufacture and processing of such products.

- Makes spot checks to discourage illegal over-the-counter sales of prescription drugs.

- Preclears new drugs before they are released for us.

- Pretests insulin, coal tar colors and certain antibiotics on a batch basis prior to their release by the manufacturer.

- Exposes fraudulent and misleading claims concerning foods, drugs, cosmetics, and devices.

More recent responsibilities include the establishment of specific tolerances for pesticides used during the growing, harvesting and distribution of food crops, as well as tolerances for all food additives under the new food additives amendment. In both cases we are required to make inspections to assure compliance with tolerances and other regulations prescribing their use.

These activities, and many more, are carried out under specific statutory authority, principally the Federal Food, Drug, and Cosmetic Act and four other consumer protection laws.

The basic food and drug law has been improved and enlarged in scope several times since its enactment in 1906. Several of the changes have been the direct result of social, economic and technological advances.

THE FOOD ADDITIVES AMENDMENT

The recently enacted food additives amendment (Public Law 85-929) stands as a striking example of such a change.

We feel that this amendment marks one of the most significant milestones in the history of food and drug law in this country. It is our view that it will prove beneficial to the consumer and industry alike.

In effect, the amendment requires that tests must be made on all food additives before they can be used. These tests must show: (1) That the additive does what it is supposed to do—generally, to enhance or improve the food in some way; and (2) that it is safe for human or animal consumption according to its intended use.

The new law not only covers additives used during the preparation and production of foods, but includes also additives used in the processing, packaging, distribution, and storage of foods.

Users or manufacturers of additives are required to conduct their own tests and file a petition with FDA showing all facts regarding the additive, its intended use, and the results of the tests. FDA must then review these findings, evaluate them, and establish tolerances for the safe use of the additive. Once established, such tolerances are required to be published as formal regulations constituting public notice.

ENFORCEMENT OF THE FOOD ADDITIVES AMENDMENT

Vigilant followup, an important aspect of the new law, deserves special attention. Failure to supplement the law with well-planned enforcement action will offer serious consequences.

The purpose of the law, of course, is to provide the consumer with protection against the indiscriminate use of harmful additives. The law recognizes that, if used properly, many additives which are poisonous in and of themselves may be used with safety. The tolerance provision provides the machinery for establishing conditions for the safe use of such additives. However, if these sub-

stances are, accidentally or in any way, used in a manner other than that prescribed by the tolerances and the directions for use, poisons will find their way into the marketplace and from there into the home. Thus the adequate enforcement of this new law is vital. This becomes most apparent when considered in light of the number of manufacturers and users of additives. There are about 6,500 producers of additives, and about 73,000 food manufacturing and processing establishments using them in their products.

We make this point not to alarm but to emphasize the need for adequate enforcement. We are sure that, if appropriately implemented, our regular enforcement operation can be geared to handle this task effectively. However, we will require additional working tools: personnel, equipment, and facilities. We will need more inspectors. Appropriate laboratory methods for use in the detection and identification of additives in foods, plus new and modern inspectional and analytical equipment are essential. We must add to our basic knowledge and competence in the field of additives, including such relatively new fields as radiology. We must determine as rapidly as possible all facts regarding current practices in the use of additives—who is using them, in what manner, and for how long.

All of these factors pose a new and interesting challenge which we face with confidence.

ECONOMIC AND TECHNOLOGICAL ADVANCES

Recent years have brought unprecedented advances in technology accompanied by a growing population and economy.

Never before have the consumers of any nation been provided with a greater variety of goods than we are today. Each year a multitude of different foods, drugs, cosmetics, and devices are manufactured in this country by tens of thousands of producers. In turn, these products are then passed on to consumers by still more thousands of wholesalers and retailers. This phenomenal volume of production and distribution is the result of technological achievements which were undreamed of a generation ago; technology which has produced a standard of living never before equaled.

It would be wrong to deny, however, that this very same technology has also produced serious problems. With the removal of food processing from family kitchens to factories, with the replacement of the neighborhood butcher and grocer by modern supermarkets, and with the production of complex products and devices, Americans are increasingly less able to control or evaluate the safety and quality of the things they need and wish to buy. For their sustenance they must depend on others who grow food, process it, package it, transport it, and then handle it in retail operations. In the use of drugs and cosmetics they must depend on the safety of new and complex chemical ingredients and on the reliability of written instructions for their use. Thus, important factors directly affecting the health and lives of all Americans are no longer under their personal control. They are obliged to trust the integrity of thousands of people—often working great distances away.

PROBLEMS RESULTING FROM ECONOMIC AND TECHNOLOGICAL ADVANCES

Few agencies of Government feel the effects of an increasing population and an expanding economy more directly than does the Food and Drug Administration. With the health and safety of more and more people to protect, with the number, variety, and consistency of products changing constantly, and with the accelerated development of new technology, it is only logical that the responsibilities of the Food and Drug Administration also increase. Since 1950—

The population of our Nation has grown an average of over 3 million each year;

Our gross national product has increased by an average of over \$20 billion a year;

The annual retail value of products over which the Food and Drug Administration has jurisdiction has increased from \$62 billion to \$70 billion;

The number of establishments subject to inspection grew from 77,000 in 1950 to 84,000 in 1958.

Marketed each year, for example, are—

900 different frozen food items;

700,000 cartons of fruits and vegetables;

195 million boxes of citrus fruits;

6 billion dozen eggs;
 1 million carloads of grain;
 100 million tons of animal forage which may contain poisons capable of passing into milk and meat products; and

Over 3 billion pounds of candy consumed, at an average of 18 pounds per capita.

Thus, the unparalleled population, economic, and industrial growth of our Nation has rapidly increased the responsibilities and workload of the Food and Drug Administration.

PESTICIDES

Prior to World War II, for example, the problem of pesticides was relatively simple. Although a number of pesticides were in use, there were only three which represented a serious problem from the standpoint of being poisonous: lead, fluoride, and arsenic compounds. These were inorganic in nature, and the development of methods to detect them was not too difficult. Since World War II, however, the problem has been greatly complicated by the introduction of synthetic organic pesticides, such as DDT. The development of methods for the detection and quantitative determination of these pesticides is much more difficult and remains a considerable challenge to the Food and Drug Administration. At the present time approximately 600 million pounds of organic pesticides are produced each year. Over 2 million farmers use them on practically every crop. Foods on which they are being used reach every consumer in the Nation. Yet, ingestion of minute amounts of these toxic pesticides in the form of residues on food could result in serious consequences.

ADDITIVES

Just as pesticides represent a formidable problem associated with the production of food, so additives represent a serious challenge in the processing of foods. There are literally hundreds of chemical additives which are likely to find their way into our food supply, and their numbers are increasing rapidly. These represent a variety of chemicals and compounds, and they are used for a myriad of reasons. Waxes, for example, are used on fruits and vegetables as polishing and protective agents. Antifoaming compounds, such as silicones, go into fruit juices and jelly processing. Propelling agents, such as nitrous oxide, are used to expel and "fluff" foods from pressurized cans. Preservatives of a wide variety have been developed to retard spoilage. Desiccants, such as calcium stearate or calcium silicate, are added to keep dry substances, such as salt and sugar, from caking. And chemicals such as ethylene gas are used on citrus fruits and tomatoes to promote ripening after harvest. All of these additives must be carefully evaluated to determine whether they are harmful in the quantities used. Likewise, they must be studied in relation to the frequency with which they are consumed over a long period of time and in relation to the possible reactions which are produced when they are mixed with other ingredients in foods. The new food additives amendment creates a new responsibility for FDA in this field.

This is also true of color additives which have a long history of use in this Nation and abroad. These are still often referred to as coal-tar colors, because there was a time when all of them were derived from that substance. Today, however, many are made from other sources.

FROZEN FOODS

The advent of frozen foods, probably more than any other single recent innovation, has brought the greatest change in the Nation's eating habits. A whole new industry has developed. There are now more than 900 frozen foods for the housewife to choose from. Since 1938, frozen-food output has soared from 268 million pounds to well over 5 billion pounds a year.

There are several questions regarding frozen foods which require answers—for example: Does quick freezing alter the nutritional quality of certain foods? Are present processing methods adequate to prevent bacterial poisoning?

Generally, frozen foods are prepared on an assembly line basis. The process usually consists of heat processing followed by quick freezing. In some instances, the products may not be free from bacteria at the time of final processing and packaging. Many frozen foods, particularly those consisting of creams, sauces, and gravies, serve as ready hosts of bacteria, including those which can result in acute illness. Chances of thawing and refreezing during distribu-

tion add to the problem of handling these foods. Added to this is the lack, as a rule, of a high-temperature final cooking process in the home.

FDA, in cooperation with industry, is doing some pilot work on this problem. Our 1960 budget provides for some increased emphasis in this area.

REHEATED FATS

It has been known for some time that the repeated reheating of fats over a wide range of temperatures brings about polymerization (changes in the basic chemistry structure) of fatty acids contained in the oils. It is also known that heat polymerization of certain fats and oils reduces their nutritional value.

There is adequate evidence that reheating produces toxins which are known to be harmful to animals. This point was highlighted by an episode which occurred in 1958. A new dropsylike disease among chickens was reported from various points throughout the country. This disease resulted in the death of millions of chickens. Investigation showed that a common factor was involved—a new fat which had recently come on the market as an ingredient in chicken feed. This new substance had been produced as a byproduct of fat which had been subjected to a high-heat process.

FDA has produced the same toxic substance in the laboratory and has produced the same fatal disease among test poultry. The toxic properties of the new product are believed to have been isolated but are not yet identified.

It is significant to note that our laboratory investigations have shown that the toxin passed through the bloodstream into the flesh of the chicken.

For some time, FDA has been seeking answers to the broad and complex question of toxins in fats. When considered in terms of the many products involving the use of reheated fats—potato chips, doughnuts, and all types of ready-to-eat fried foods—it becomes obvious that this question must continue to receive emphasis.

RADIOLOGY

Manmade sources of radiation are on the increase. Peaceful uses of this new and promising source of energy are receiving more and more attention.

The basic mission of FDA includes an inherent responsibility for knowledge of the effects of radiation on the Nation's food and drug supply. We have done some work in this field, beginning as early as 1954. We have had to confine our efforts to a limited program of monitoring selected foods to determine whether or not radiation levels have increased since 1945, the year of the first nuclear explosions.

Essentially, this work has been undertaken to add to our understanding of the total problem and to develop very basic techniques of analysis and evaluation.

Up to the present time about 2,600 samples of the more common foodstuffs have been studied. The results of these studies show—

1. Some degree of contamination of fruits and vegetables.
2. Indication of contamination of seafoods, particularly certain fish and shellfish.
3. In consonance with the Public Health Service and other investigators, contamination of dairy products, including fluid milk and cheese.
4. A marked increase in the contamination of tea.

It should be noted that in each of these cases the contamination levels have been within the safety limits prescribed by the National Committee on Radiation Protection and Measurement.

We should emphasize that our work in this area has been very limited, and in some ways rather crude. These findings are not conclusive. They do, however, give ample evidence that a problem exists and that it does require special emphasis on the part of FDA.

We are alert to the fact that radiology is a new field of science in itself, one in which we must become increasingly more competent. Although it is still relatively new among the several scientific disciplines, it holds great promise of contributing appreciably to many aspects of food and drug technology.

CHEATS AND FRAUDS

One of our basic responsibilities includes protection against frauds and quackery. The rate of incidence of misleading and fraudulent claims for consumer products rises in almost direct proportion to the economy. Such practices are definitely on the increase today.

Weight reducers, for example, are subjects of renewed popularity. We are told that over \$100 million was spent in this country last year for drugs and devices represented as being useful for this purpose. Sales of vibrating machines, some of which all but guarantee weight reduction without diet as well as other miraculous benefits, are booming.

Probably the most widespread and expensive form of quackery—at least for the misguided consumer—is misrepresentation of vitamins, minerals, and other food supplements as cure-alls. Promotion of such products has become big business, and many such firms are operating on a national scale.

Here again, more attention in the form of vigorous enforcement of the law is required.

ACCOMPLISHMENTS, 1958

Midway in 1957 we undertook a comprehensive study to identify the total workload obligation of FDA. This study was completed in 1958. It provides information—much of which is available for the first time—as to the number and types of establishments subject to the Federal food and drug law, the status of their compliance, and the degree of their coverage by FDA. The findings are most enlightening.

WORKLOAD

The survey indicates the following workload:

Eighty-four thousand establishments—manufacturing and processing plants, distribution centers and warehouses—operating in a manner affecting interstate commerce.

Three hundred and twenty thousand public eating places subject to regulation under the oleomargarine amendment.

Fifty-six thousand drugstores dealing in prescription drug sales.

Sixteen thousand wholesale produce shippers of raw fruits and vegetables.

These data include only those establishments accounting for the majority of interstate commerce. They do not include establishments representing a secondary workload, such as retail food stores and wholesale fruit and vegetable dealers.

DEGREE OF COMPLIANCE WITH LAW

The most revealing fact produced by the survey deals with the current status of compliance among these firms: Only 48,000, 58 percent, of the firms are considered to be in such satisfactory condition as to constitute a minimum workload obligation. The remaining 42 percent is believed to be in either actual or potential violation of the law to some degree. Of this number 14 percent is estimated to be in serious violation of the law, to a degree which, assuming adequate evidence, would lead to court action. The establishments which make up the group in less serious violation account for 23 percent of the total. A determination as to degree of compliance could not be made with respect to 5 percent of the establishments.

This information establishes rather clearly the magnitude of the inspectional problem facing FDA. It should prove invaluable in the planning of our future work.

PROGRESS IN THE LABORATORY

The popular image of the Food and Drug Administration often overlooks the fact that a very considerable portion of our activities involves research undertaken by a staff of over 400 qualified scientists, working in practically every scientific discipline. This research is conducted in order to evaluate the components of foods, drugs, devices, and cosmetics, and to appraise their efficacy, toxicity, and acute and long-range effects. Research is also performed to develop analytical methods for use in field analyses of samples collected by our inspectors and to develop food standards and tolerances for pesticides and food additives. As a result of this research many new procedures in methodology have been developed by FDA scientists at the bench.

In 1958, for example, our scientists developed a procedure to test time-disintegration drugs. Such drugs have become widely used in recent years. They often contain potent stimulants and depressants and it is extremely important that they disintegrate in the human body at their claimed rates in order to avoid overdosage and provide the desired effects. The development of a procedure to test their rates of disintegration, therefore, contributed a valuable control tool

needed by both Government and industry. Following this discovery a dozen drug manufacturers sent their representatives to our laboratories in order to study the new method.

Last year our chemists also developed a laboratory method for the identification of very minute quantities of chemicals in foods and drugs. Using a modification of a basic procedure referred to by scientists as paper chromatography, our analysts can detect as little as a hundred millionth of an ounce of certain chemicals. This degree of sensitivity is required, for example, in the checking of such complex chemicals as parathion, one of the new pesticides. It is also used in the testing of drugs to detect potent hormones (steroids) used in treating female disorders and arthritis. The procedure promises to become an outstanding reference in this field.

After 10 years of study, Food and Drug chemists last year perfected an accurate chemical method for determining the strength of vitamin D preparations. This represents a major improvement over the expensive and time-consuming biological test, using rats or chicks, which has been used for the past 30 years. They also developed a new test for residues of Dieldrin, one of the most toxic insecticides used on crops; a test which is three times as sensitive as the old one and much more reliable. In addition, a biological test was developed by our scientists to detect various toxic chemical residues in poultry which are fed with feed containing certain chemical additives.

All of these activities represent a very basic operation of the Food and Drug Administration and contribute necessary information not only to our inspectors but also to the food, drug, and cosmetic industries of this Nation. The net result is improved consumer protection.

COMPLIANCE AND REGULATORY ACTIONS

For those not directly associated with the Food and Drug Administration it is difficult to realize fully the scope of the role it plays in assuring compliance of the laws for which it is responsible. This role includes the promulgation of standards of identity and quality for foods, and tolerances for poisonous substances in foods. It calls for an extensive program of consumer education, as well as a close liaison to assist State and local food and drug agencies. It also includes the seizure of illegal products, the recall of dangerous products, injunctions, and the prosecution of cases through the judicial system. These cases sometime find their way to the Supreme Court itself, as occurred this past year when the Court upheld the Food and Drug Administration's position that the present law permits a ban on the use of coal-tar color, the toxicity of which can be demonstrated in animal tests, even if the Government cannot prove the color to be harmful to humans in the small quantities normally used.

It is the basic philosophy of the Food and Drug Administration to use every proper procedure to prevent violations of the law. In our efforts we receive a remarkable degree of cooperation from the majority of food, drug, and cosmetic manufacturers who have a keen sense of their responsibility to consumers and who also appreciate the protection we afford them against unfair competitors. Voluntary compliance, therefore, follows in a great many cases. Thus, the Food and Drug Administration can largely focus its regulatory attention on the fringe groups that are either careless or culpable and attempt significant and substantial violations of the law. In such cases our organization pursues their prosecution vigorously.

In 1958, FDA referred 203 criminal prosecutions to the Federal courts. We also undertook 22 injunction actions and seized 1,027 lots of foods, drugs, and cosmetics after inspection had disclosed factors dangerous or misleading to consumers. In addition, a number of products were recalled from the market. These included injection drugs containing about half the potency claimed on their labels, batches of antibiotic drugs which had decreased in potency after shipment, stocks of olive oil contaminated with camphor, processed foods containing particles of glass, mislabeled drugs, and shipments of a press-on nail polish which was causing serious injury to fingernails.

DRUGS AND CERTIFICATION SERVICES

Another important responsibility of the Food and Drug Administration is the evaluation and approval of all new drugs before they are marketed.

During 1958 the Food and Drug Administration approved 348 new applications as well as 1,494 supplementals.

As a result of studies made by our scientists a total of 153 drug seizures were made, 65 of which were based on false and misleading claims, and a number of others for failing to provide adequate labeling instructions. These drugs included gargles and dietary preparations promoted for the prevention of Asian flu, as well as other preparations claimed to be effective in the treatment of arthritis, circulatory disorders, vitamin deficiencies, and various chronic illnesses of the aging. During 1958 a number of so-called time-distintegration drugs were also seized because of their failure to live up to their claim for time-distintegration action.

In the area of certification activities, FDA processed 16,264 batches of antibiotics, 371 batches of insulin, and 5,015 batches of colors submitted by manufacturers. In addition, 439 tolerances were established for 35 different chemical pesticides.

DETAILS OF THE 1960 BUDGET

The 1960 Food and Drug budget is to a good extent oriented toward some of the problems which we have emphasized here today. It calls for a net increase of \$850,000 over the proposed 1959 level of operations. This will provide an additional 135 positions. We should make one point regarding our 1959 budget program. Appropriations for salaries and expenses currently available are \$9,800,000 for 1,251 positions. The supplemental appropriation now before the Congress adds \$1,150,000 and 61 new positions to this amount for a total of \$10,950,000 and 1,312 positions. As you know, the supplemental contained two items: \$772,000 to cover the 1959 costs related to the Federal Employees Pay Act of 1958, and \$378,000 to permit initial implementation of the Food additives amendment enacted toward the end of the last session of the 85th Congress.

Gross increases included for 1960 fall into three broad categories:

1. \$316,000 to cover mandatory costs, including annualization of staff increases authorized first in 1959.

2. \$480,800 to implement the food additives amendment. Sixty additional jobs are included for this purpose.

3. \$981,800 for improvements in our regulatory programs. Seventy-five positions are included for this purpose. These increases will permit FDA to take another modest step toward the objectives of the Citizens Advisory Committee. Major elements include—

Funds for initial staffing of the new Dallas district office scheduled for opening in 1960.

Funds to extend research activities in the field of frozen foods.

Additional medical staff to work on new drug applications.

Funds to extend our equipment and facilities modernization program which was begun in 1957.

Offset against these gross increases are decreases due to nonrecurring costs authorized in 1959.

In addition to our regular salaries and expenses appropriation, the FDA budget includes a request to finance activities related to the certification of antibiotics, insulin, colors, and the establishment of pesticide tolerances. The cost of these activities is covered by fees collected from industry. The 1960 budget for these operations contemplates an increase of \$30,000 over 1959. This increase will, of course, be financed from fees.

AMOUNT REQUESTED

Mr. LARRICK. Fine, sir.

May I introduce a new addition to our staff, Dr. Day, from the University of Arkansas Medical School. Dr. Day is now coordinating our research effort.

Senator HILL. It is good to have you, Doctor.

Mr. LARRICK. Mr. Chairman and members of the committee, the President's budget for the Food and Drug Administration calls for an appropriation of \$11,800,000 for 1960, a net increase of \$850,000 and 135 positions over the budget proposed for the current year.

Senator HILL. How many new positions?

Mr. LARRICK. 135.

CATEGORIES OF INCREASE

The gross increases amount to \$1,778,600 and fall into three categories:

First, an increase of \$316,000 is requested for mandatory costs—annualization on a full-year basis of personnel authorized for the first time in 1959, and 1 extra payroll day which occurs in 1960.

Second, an increase of \$981,800 and 75 positions for our regular programs. These increases will provide:

Funds for initial staffing of the new Dallas district office scheduled for opening in 1960. Fifty positions are designated for this purpose;

Funds to extend research activities relating to bacterial contamination of frozen foods;

Additional medical staff to work on new drug applications; and, finally,

Funds to extend our equipment and facilities modernization program which was begun in 1957.

Senator HILL. How much for that purpose, Mr. Larrick?

Mr. CARDWELL. The equipment increase falls into several categories, sir, one of which is \$193,100 for purposes of replacing equipment that is carried in inventory.

There would also be about a half million dollars worth of other equipment, including an amount of \$123,000 for special items of modern scientific equipment. The remainder would relate to equipment for new employees.

THE FOOD ADDITIVES AMENDMENT

Mr. LARRICK. You will recall last year, Senator, in your other committee there was a food additive amendment passed and the third major item of increase includes \$480,800 requested for further implementation of the food additives amendment to the Federal Food, Drug, and Cosmetic Act.

As you know, this amendment, which represents a new responsibility for FDA, was enacted during the closing days of the last Congress. A supplemental appropriation request for 1959 to cover initial implementation of this new law is now pending before the Congress, having been acted upon here just a few days ago.

As proposed, and as passed by the Senate, the supplemental would provide \$378,000 and 61 new positions. The 1960 budget calls for an additional 60 employees to bring the total food additives staff to 121 positions by the end of 1960.

At this point, Mr. Chairman, I would like to take a moment to comment on the effects of the food additives amendment on the responsibilities and work of the Food and Drug Administration.

Simply stated, the food additives amendment requires that all additives in foods be evaluated for safety before they are put on the market. To achieve this objective, the law requires, for the first time, that industry conduct its own tests to determine the safety of an additive. Once a manufacturer has tested an additive and found it, in his judgment, to be safe, he may petition the Food and Drug Administration for a tolerance for use in food.

The petition must include all facts regarding the additive, including data relating to pharmacological and other toxicity tests as well as

information regarding the proposed conditions of use, in what foods and in what amounts. The Food and Drug Administration must then review these findings and arrive at a final determination as to the safety of the additive.

Thus the new law places a heavy and important responsibility squarely with FDA.

OTHER ASPECTS OF ADDITIVE LAW

In addition to the review and evaluation of petitions from industry, there are two other significant aspects of the law which directly affect the Food and Drug Administration.

The first deals with regulation making. The law requires that tolerances for given additives be established only through the issuance of formal regulations—following public notice.

The second, and extremely important in our view, relates to responsibility for the enforcement of these regulations. The law creates a need for vigilant followup through periodic factory inspections and sample analysis to assure that approved additives are used according to the conditions prescribed by their tolerances.

In this same connection, we must also be certain that additives which have not been cleared are not used in foods.

Both the 1959 supplemental and the regular 1960 budget have been designed to meet these new responsibilities. Together, they provide scientific staff to work on the review and evaluation of industry petitions, supported by necessary technical and administrative personnel.

We have also included inspectional and laboratory personnel to meet the added enforcement workload created by this new law.

EFFECT OF HOUSE ACTION

Mr. Chairman, I would like to comment on the effects of the House action.

As you know, the House increased the President's budget for the Food and Drug Administration by \$2 million. As pointed out by the Secretary, any increase over the President's budget would be contrary to the fiscal policies of the President.

However, in accordance with the committee's request, we have filed, as a part of our formal opening statement, a description of the ways in which the additional funds might be used, if enacted.

Briefly, they would be used as follows:

IMPROVEMENTS IN FDA FIELD FORCE

Almost half of the increase, \$980,000, would be used to strengthen and improve our operations in the field. In all, 128 additional employees would be added to our district offices.

Included in this number would be personnel to raise staffing of the enlarged Atlanta and newly authorized Dallas district offices from 50 employees each to full strength of 80 employees.

Also included would be enough inspectors, 70, to produce about 1,000 additional factory inspections in 1960.

These funds would also be sufficient to provide new and improved quarters for two existing districts.

Senator HILL. Mr. Larrick, I think I am familiar with the matter because I happen to serve on the legislative committee which considered the additive amendment in the last session of Congress, but for the record and for other members of the committee, give us briefly a little more detail as to your field force operations and how they would strengthen it.

FIELD LABORATORIES

Mr. LARRICK. Senator, we have 17 field laboratories scattered throughout the United States. These laboratories are manned by laboratory scientists and inspectors, and on the average each one of these districts covers about four States, between 3 and 4 States. Our inspectors, who are all technically trained people, visit factories engaged in the production and manufacture of foods, drugs, or cosmetics and go through them and see if they find anything that is wrong or anything that is suspect.

Simultaneously, we collect samples from these factories, not at the factory ordinarily, but generally at wholesale places after the goods have moved in interstate commerce; we then analyze these goods to see whether or not they comply with the law.

This food additives amendment puts all food about in the same category as agricultural crops. A special part of our law, as you know, deals with the use of pesticides on agricultural crops. If you are going to allow poisons in foods, even in safe amounts, it is very important that our staff be implemented to collect samples all the time and make sure that these tolerances are observed. The extra number of people in the field would permit us to take on that job and do a fairly good job of it.

NEED FOR ADDITIONAL FUNDS

Senator HILL. I notice you say a fairly good job.

If you do not have the \$2 million, what kind of a job would you do then?

Mr. LARRICK. We would do that much less.

I don't think this will be the end of the requests that we will make of you, because as times goes on and the population grows, we think that the Food and Drug Administration should grow.

Senator HILL. Of course there have been so many changes and there are so many changes in this matter of food, and processing of food, and frozen foods, and all other kind of things today that we never dreamed of a few years ago; isn't that right?

Mr. LARRICK. Yes; convenient foods create problems of processing.

COSTS FOLLOWING INADEQUATE ENFORCEMENT

Senator MONRONEY. In connection with, say, a new law that requires conformity to the agricultural standards or other new requirements, if that law is not enforced at the beginning by adequate numbers of inspectors and people that can check to set the pattern of enforcement, then does it not cost you a great deal more and cause manifold troubles later after industry may think, well, this law can be dis-

regarded; or we don't have to observe the tolerances required by the law?

Mr. LARRICK. Yes, I think in general, unless a law is going to be enforced, any law, it would be better not to enact it because it is apt to be disregarded.

Senator MONRONEY. Once disregarded at the opening, then you compound the difficulties of bringing them into line after it has become perhaps an industry habit to say, "Well, nobody is going to pay any attention to this law. It is just another thing that Congress passed?"

Mr. LARRICK. I think that is true.

Senator HILL. The Senator is certainly right about that.

I want to start the enforcement as soon as you pass your law.

Senator MONRONEY. As the twig is bent, so is the tree inclined.

Senator HILL. That is right. All right, Mr. Larrick.

INCREASED RESEARCH

Mr. LARRICK. The second phase would be to strengthen research.

About \$706,000 would be used to strengthen our research effort. These funds would add 51 new scientists to our Washington laboratories to work on the following specific research projects:

A project to detect and identify pesticide residues on foods.

A project to determine the effects of radioactivity on foods and drugs.

A project to investigate the presence of carcinogens in manufacturing containers for food.

Senator MONRONEY. What is that?

Senator HILL. Certainly for the record, tell us what those carcinogens are exactly?

Mr. LARRICK. During the last decade, as you have said, there have been many, many technological changes in all aspects of food production, manufacture, and handling, and paper containers for foods that are either solids or liquids have come into very common usage. Some of the waxes that have been used on some of these food containers have been suspect of containing very minute amounts of substances which are regarded by competent scientists as capable of producing cancer.

I don't want great public alarms to come out of what I am saying here, because there is no need for alarm, but to detect these materials that are present, in parts per billion, you have to spend a great deal of time devising very, very delicate laboratory tests that will make these very fine distinctions, and that would be the purpose of systematically examining all these newer waxes that are proposed for use on food or are actually used in the packaging of foods.

Senator HILL. And without this \$2 million additional that the House has provided you would be limited in carrying on this project of investigation; would you not?

Mr. LARRICK. Yes.

Senator HILL. In other words, you could not do the project as it should be done?

Mr. LARRICK. We would not tackle this one at all.

Senator HILL. If you did not have these additional funds the House has provided you could not tackle this project at all?

Mr. LARRICK. No, sir.

RADIOACTIVITY IN FOOD AND DRUGS

Senator MONRONEY. Could I ask, while he is interrupted, about this effect of radioactivity on foods and drugs?

Do you get any help from the Atomic Energy Commission?

Mr. LARRICK. A great deal.

We have committees now that include collaboration with the Public Health Service and the Atomic Energy Commission. The medical group in the Atomic Energy Commission works very closely with our people. We are very well satisfied.

Senator HILL. In other words, this would not duplicate any of the work they do; it merely puts into gear the effectiveness of all of this other study; is that right?

Mr. LARRICK. That is right.

The Food and Drug Administration is primarily responsible for the safety of our food supply. We would take everything that they find out and use it and find out some more things ourselves to be sure that, as the radioactivity becomes more and more a part of the industrial life of this country, it does not contaminate the food supply.

Another interesting project that we would undertake would be a project to develop methods of analysis for adrenal and cortex hormones.

These are drugs that are truly marvelous, but our methods of analysis to determine just how potent they are leaves a lot to be desired, and again this is very complex chemistry.

MEDICAL ACTIVITIES

Over \$145,000 would be used to improve our medical programs, including five new positions to work on the processing of new drug applications, as you know FDA is required to approve every new drug marketed in this country.

Senator MONRONEY. May I ask one question there?

I hear over television all kinds of new drugs, including pills that will slenderize fat Senators and ladies that are too plump.

Does that come under the category of drugs?

Mr. LARRICK. Yes, but the advertising is subject to the Federal Trade Commission Act, as I recall.

Senator MONRONEY. Yes.

You check to see that they are not deleterious to the person or the individual, and they cannot be marketed if your findings are that these patent medicines that are supposed to work miracles on fat people are something that would have a long-range harmful effect to the body?

Mr. LARRICK. They have to prove to our satisfaction that they are safe before they can put them on the market, and that applies to the drugs that the doctor uses as well as proprietary medicines.

PATENT MEDICINE

Senator MONRONEY. Of course, with the advertising trade seeming to stimulate more and more patent medicines, it seems like there is a wide new variety coming into being almost with every new television show.

Mr. LARRICK. Fortunately, they rarely try to treat the really serious disease.

You don't see them for cancer, TB, diabetes, but you certainly see a lot for lesser conditions.

NEW PERSONNEL

These medical activities would include five new positions to work on the processing of these new drug applications and three additional positions and sufficient funds to establish a system, in collaboration with participating hospitals, to identify unanticipated adverse reactions to new drugs after they have gone on the market.

Four new jobs would be added to study quack drugs and devices, including funds for clinical studies of such products. Increases in this area should produce new evidence to support court actions against other than just the most flagrant violations.

EDUCATIONAL, REGULATORY, AND ADMINISTRATIVE ACTIVITIES

We would expand our educational, regulatory, and administrative activities. The remainder of the increase, approximately \$168,000, would be used to improve our educational, regulatory, and administrative activities.

A total of 22 jobs would be added to these areas.

I overlooked one research project, to study the presence of toxic properties in reheated fats.

That concludes my summation of my testimony.

Senator HILL. Can you give us an illustration of that last one, the reheating of fats?

PROBLEM OF FATS

Mr. LARRICK. As more and more of our foods are produced in the factory, the fat that is used to make all manner of fried foods is used over and over and over again, and there have been some pretty serious charges made that, under very special conditions, these fats that are heated over and over and over again can produce some byproducts in the fat that may be toxic. We want to make a broad study of this and find out just what the conditions are that make these toxic substances form, and then rule it out.

This matter came to our attention in a very emphatic way when a firm in Cincinnati took some fat that they had recovered from various places and gave it a special heat treatment and put it in chicken feed and killed millions of chickens. This incident brought very dramatically to our attention the fact that we should look into this matter.

STATUS OF BUILDING

Senator HILL. Mr. Larrick, the Food and Drug Administration made an attempt to get a building here in the District, not only to house its administrative officers, but also for its laboratories. They made that attempt under the old lease-purchase program.

What is the status of that building now?

Mr. LARRICK. Money was appropriated, Senator, to do the architectural work and that is progressing nicely. Money was appropriated

to buy the site and to tear down the old buildings. That is accomplished, but no money has been provided to proceed with the building itself.

Senator HILL. Are your plans all completed?

Mr. LARRICK. They are in the process of completing them. They will be completed this fiscal year.

Senator HILL. You mean this present fiscal year, 1959?

Mr. LARRICK. Yes.

Senator HILL. In other words, they will be complete by July 1?

Mr. LARRICK. That is right. They will be completed.

Senator HILL. What do you estimate the cost of that building to be?

Mr. LARRICK. \$23 million. It is a very highly specialized, fine laboratory building.

We are now in four different locations, and our laboratories, located in the Department of Agriculture Building, are very much out of date.

Senator HILL. And you are so scattered?

Mr. LARRICK. That is right, with four different locations.

Senator HILL. However, there is no budget estimate for that in the budgets of next year?

Mr. LARRICK. No, sir; there is no building provided for.

Senator HILL. However, your plans will be ready by July 1?

Mr. LARRICK. That is right.

Senator MONRONEY. Are these four buildings all Government buildings, or are some of them private?

Mr. LARRICK. No. They are all Government buildings. One of them is temporary, one is over in the former Providence Hospital nurses building, part of it in the South Agriculture Building, and the rest of it is in the Health, Education, and Welfare Building.

RECOMMENDATIONS OF ADVISORY COMMITTEE

Senator HILL. Mr. Larrick, several years ago you had for study some important recommendations from your Citizens Advisory Committee. How long has that been?

Mr. LARRICK. That has been 4 years ago.

Senator HILL. How have you done so far as your progress with reference to the recommendations made by that committee?

Mr. LARRICK. This group of very distinguished people, including folks from industry, representatives from women's organizations, and others, recommended that the Food and Drug Administration grow from threefold to fourfold within a period of 5 to 10 years. The plan was to adopt the minimum amount of that growth, and here is a chart that shows what has happened.

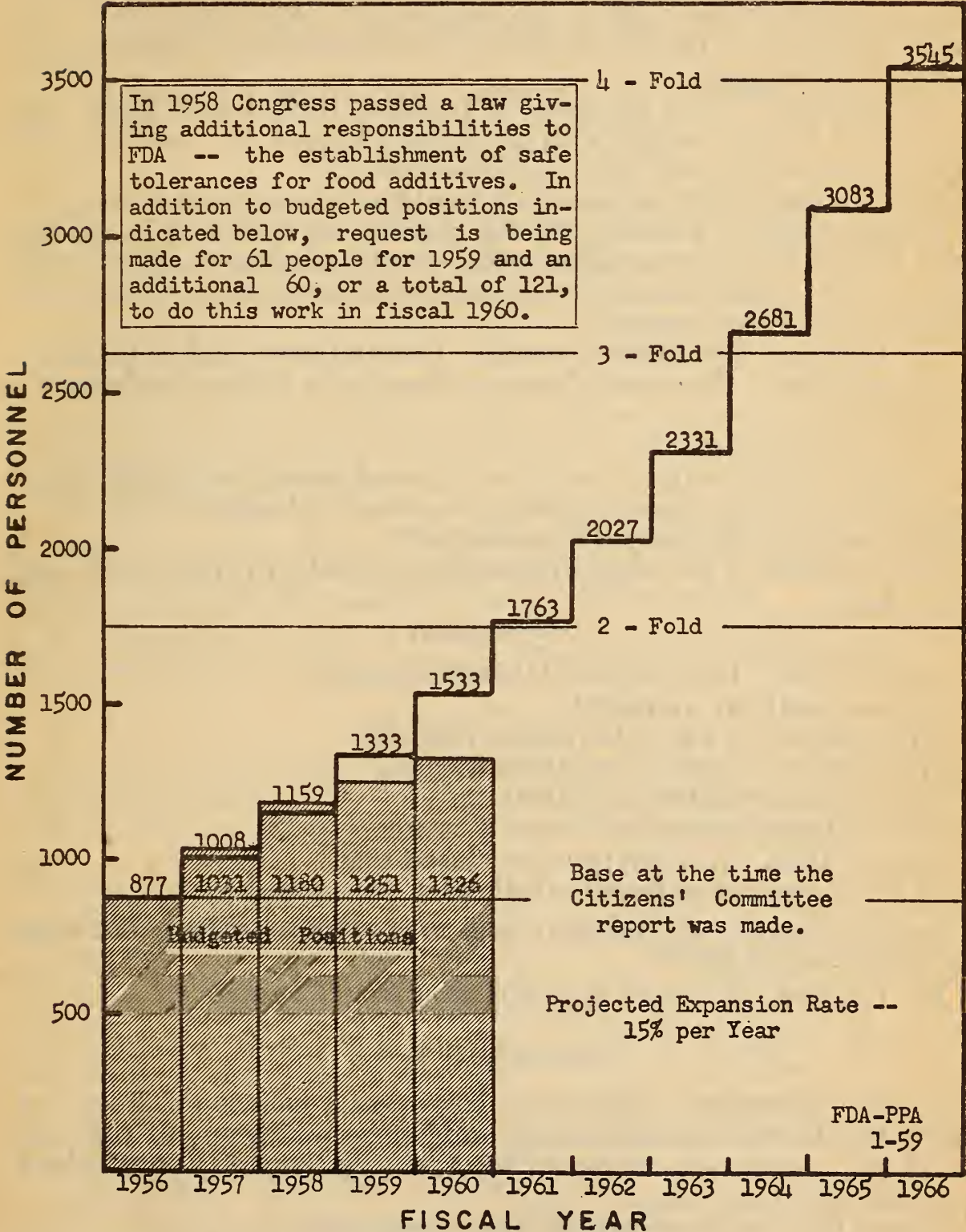
Senator HILL. You do not have extra copies of that chart?

Mr. LARRICK. Yes; we do have. We will be glad to put that in the record.

Actually, we are behind the minimum the committee recommended right now.

(The information referred to follows:)

PROGRESS IN F. D. A. PERSONNEL EXPANSION
AS RECOMMENDED BY THE
CITIZENS ADVISORY COMMITTEE



The projection shows increases necessary to meet the expansion recommended by the Citizens Advisory Committee in the maximum time period (10 years). Shaded columns indicate staff for activities on enforcement programs operating in 1956.

LAG IN APPLYING RECOMMENDATIONS

Senator HILL. How much behind are you?

Mr. LARRICK. Quite substantially behind.

Mr. CARDWELL. For example, in fiscal year 1959, the recommendations of the Citizens Advisory Committee, on the basis of that growth factor which would bring about a fourfold increase at the end of the period, would have required approximately 1,333 employees. The regular budget for 1959, exclusive of the food additives program, provides 1,251 positions.

Mr. LARRICK. So we are about 80 positions behind as of 1959. We would fall farther behind with the present budget, but would almost come up to the minimum with the House action.

Mr. CARDWELL. The House action would bring us up to the minimum.

Senator HILL. I wonder with the changes we have seen in the last 4 or 5 years if that committee made certain recommendations today whether their recommendations would be different from those at the time they made their report.

Mr. LARRICK. I think they would. I think they would be higher.

Senator HILL. Have you given any thought to further study by the committee?

Mr. LARRICK. Yes.

I think that the time has about arrived when we should either reenact that committee or perhaps a new one to look into this.

Senator HILL. To study this whole field?

Mr. LARRICK. The broad, fast-changing field of food and drug technology.

COST OF STUDY

Senator HILL. How much did that study cost?

Do you recall, Mr. Larrick?

Mr. LARRICK. It was of the order of \$25,000.

Mr. HARVEY. I think it was about \$30,000.

Mr. LARRICK. \$25,000 to \$30,000.

We will be glad to supply the exact figure.

Senator HILL. All right; you may insert that.

(The information referred to follows:)

Costs in connection with the study made by the Citizens Advisory Committee were approximately \$23,450.

Mr. LARRICK. It was an appropriation from Congress.

CONTAMINATED EGGS

Senator MONRONEY. Among the cases that I believe the Food and Drug Administration took action on was the powdering of contaminated eggs which you suspected were finding their way into bakery products and other things.

Do you feel you have successfully stopped that?

Mr. LARRICK. No. That is a terrifically lucrative business. You can go around to all these incubator places where they hatch eggs by the millions and buy up the infertile eggs that hadn't hatched for 7 cents a dozen, freeze them into big cans, and sell them for a fancy price. They are hard to stop.

We are in the process of bringing a number of them into court, but it is so lucrative for the unscrupulous operator that I am afraid we are

always going to be doing something in this area. We have been very successful, though, lately, in seizing tremendous quantities.

Senator MONRONEY. You discovered this process and then took action, I believe, to try and stop it.

Mr. LARRICK. That is right.

Senator MONRONEY. Funds are included in this for preventing these hatchery eggs from finding their way into pies, and cakes, and things?

Mr. LARRICK. That is right. That is very definitely an important part of this.

PHILADELPHIA POISONING CASE

Senator MONRONEY. I am trying to recall some of the cases that I thought were rather spectacular that sometimes we forget about; for example, this contaminated fish at Philadelphia where apparently they used the wrong chemicals for preservatives or seasoning.

I think you are certainly to be commended on the Herculean efforts you took to warn people of the dangers immediately on that.

Mr. LARRICK. We were very fortunate there was only one death, because there could have been mass deaths if we had not had the help of a lot of other organizations, because the fish was poisonous.

You are a very close observer.

Senator MONRONEY. It always seems to me that the type of law enforcement you may find in the laboratories and test tubes provides probably better cases of public protection than the two-gun shoot-em-up western sheriff who seems to offer it on TV programs.

Mr. LARRICK. We have a case right today in the office that shows what happens with some of these new technical developments.

FLUID FOR CONTACT LENSES

These eyeglasses that you put right in your eye, called contact lenses, are becoming very popular, and a chap on the west coast makes a fluid that you put on this contact lens just as you insert it in your eye.

One of our inspectors went through there a few weeks ago and he discovered they were careless in the manufacturing operations and he guessed that the fluid would be contaminated with bacteria, so he took samples from the market last week. These were analyzed and found to be, not only contaminated, but contaminated with a bacteria which found, in a previous episode with another firm some years ago, was the cause of a number of cases of blindness. So we are in the process today, on a nationwide basis and in cooperation with the firm now that they know the effects, of taking it off the market from one end of the country to the other.

Senator HILL. That is an astounding story.

Why would a manufacturer be so careless that way and disregard the public welfare?

Mr. LARRICK. He didn't think there was any danger involved in it. He is engaged in an awful lot of manufacturing, Senator.

Senator HILL. I understand that.

Mr. LARRICK. Most of them are very careful.

Senator MONRONEY. The very presence of the Food and Drug Administration is one of the reasons that maybe people's habits and

taking for granted that things will be all right finally lead to the whole industry staying in step?

Mr. LARRICK. That is right. That is very true.

Senator HILL. I take it from your testimony, Mr. Larrick, that you really very much need this additional \$2 million that the House has granted.

Mr. LARRICK. I think so; yes, sir.

Senator HILL. Senator Monroney, do you have any more questions?

Senator MONRONEY. No, sir.

Senator HILL. Thank you very much.

Is there anything you would like to add?

Mr. LARRICK. No.

I am always glad to come before this committee.

Senator HILL. Thank you, sir. We are always glad to have you here. We appreciate your presence.

Thank you.

FREEDMEN'S HOSPITAL

STATEMENTS OF DR. CHARLES E. BURBRIDGE, SUPERINTENDENT, FREEDMEN'S HOSPITAL; ACCOMPANIED BY DR. R. FRANK JONES, MEDICAL DIRECTOR, FREEDMEN'S HOSPITAL; AND HENRY H. BAIRD, BUDGET AND FISCAL OFFICER, FREEDMEN'S HOSPITAL

APPROPRIATION ESTIMATE

"For expenses necessary for operation and maintenance, including repairs: furnishing, repairing, and cleaning of wearing apparel used by employees in the performance of their official duties; transfer of funds to the appropriation 'Salaries and expenses, Howard University' for salaries of technical and professional personnel detailed to the hospital; payments to the appropriation of Howard University for actual cost of heat, light, and power furnished by such university; **[\$2,975,000]** \$3,190,000: *Provided*, That no intern or resident physician receiving compensation from this appropriation on a full-time basis shall receive compensation in the form of wages or salary from any other appropriation in this title: *Provided further*, That the District of Columbia shall pay by check to Freedmen's Hospital, upon the Surgeon General's request, in advance at the beginning of each quarter, such amount as the Surgeon General calculates will be earned on the basis of rates approved by the Bureau of the Budget for the care of patients certified by the District of Columbia. Bills rendered by the Surgeon General on the basis of such calculations shall not be subject to audit or certification in advance of payment; but proper adjustment of amounts which have been paid in advance on the basis of such calculations shall be made at the end of each quarter: *Provided further*, That the Surgeon General may delegate the responsibilities imposed upon him by the foregoing proviso."

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$2, 975, 000	\$3, 190, 000	\$3, 190, 000
Supplemental estimate pending before Congress.....	116, 000		
Reimbursements.....	1, 479, 000	1, 530, 000	1, 530, 000
Total obligations.....	4, 570, 000	4, 720, 000	4, 720, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
General hospital.....	445	\$2, 747, 412	449	\$2, 837, 490	449	\$2, 837, 490
Tuberculosis hospital.....	72	430, 877	72	445, 350	72	445, 350
Outpatient services.....	71	434, 173	71	456, 985	71	456, 985
Training program.....	32	525, 531	32	539, 342	32	539, 342
Administration.....	68	432, 007	70	440, 833	70	440, 833
Total.....	688	4, 570, 000	694	4, 720, 000	694	4, 720, 000

Obligations by objects

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Personal services.....	688	\$3, 742, 000	694	\$3, 810, 929	694	\$3, 810, 929
Travel.....		1, 500		1, 500		1, 500
Transportation of things.....		400		600		600
Communication services.....		24, 375		24, 375		24, 375
Rents and utility services.....		123, 400		123, 400		123, 400
Printing and reproduction.....		3, 785		3, 785		3, 785
Other contractual services.....		54, 110		69, 229		69, 229
Supplies and materials.....		525, 000		569, 035		569, 035
Equipment.....		52, 340		72, 957		72, 957
Grants, subsidies, and contributions.....		157, 475		158, 848		158, 848
Taxes and assessments.....		10, 500		10, 500		10, 500
Subtotal.....	688	4, 694, 885	694	4, 845, 158	694	4, 845, 158
Deduct quarters and subsistence.....		124, 885		125, 158		125, 158
Total obligations.....	688	4, 570, 000	694	4, 720, 000	694	4, 720, 000

New positions requested

	Grade	Annual salary
General Hospital: Nursing assistant (4).....	GS-3	\$14, 060
Administration: Collection clerk (2).....	GS-4	7, 530
Total new positions, all activities (6).....		21, 590

GENERAL STATEMENT

Senator HILL. The Freedmen's Hospital, with Dr. Burbridge, is next.

We are glad to have you here again, sir.

Doctor, will you proceed. We will be glad to have your statement appear in full in the record, and have you proceed in any way you see fit.

Dr. BURBRIDGE. Thank you very much, Senator.

Before I start I would like to introduce Dr. R. Frank Jones, who is the new medical director.

Senator HILL. We are glad to have you here, sir. It is nice to have you.

DESCRIPTION OF HOSPITAL

Dr. BURBRIDGE. Mr. Chairman and members of the committee, Freedmen's Hospital consists of a general hospital with a total of 320 beds and 50 bassinets; 150-bed tuberculosis hospital; and an outpatient department composed of 36 organized clinics and 2 emergency operating rooms.

The hospital's physical plant consists of 8 buildings located on 11 acres near the downtown area of Washington, D.C. Its buildings include separate general and tuberculosis hospital units, an outpatient clinic building, two residences for nurses, a residence for interns, an auxiliary building, and a maintenance shop, all of which were constructed 25 to 50 years ago, with the exception of the tuberculosis hospital which was completed in 1940.

FUNCTIONS OF THE HOSPITAL

With the facilities described above the hospital conducts activities embracing four basic functions, namely:

1. Medical care of patients through the provision of services on an in- and out-patient basis for substantially all types of illnesses. In this connection 131,710 patients days of service were rendered to 14,083 individuals on the inservice, and there were 95,213 patient visits to the outpatient service in fiscal year 1958.

2. The education of physicians, nurses, and other adjunct professional and technical personnel in 20 separate training programs involving approximately 180 hospital trainees, 150 medical students, and 60 affiliated for a total of 390.

TOTAL NURSE GRADUATES

Senator HILL. Let me ask you a question there.

As you know, we have quite a shortage of nurses. How many nurses are you graduating on the average now?

Dr. BURBRIDGE. We graduate on the average of 35 or 40 nurses a year. The total number of nurses at Freedmen's Hospital that graduated since 1894 is 1,364, not including the present class. This is a small effort, but an important one, I think, Senator, in providing nurses, which are one of the groups in short supply in this country.

Senator HILL. There is no question about that. We need more nurses.

Doctor, in that connection, how long a course does your nurse have before graduation?

Dr. BURBRIDGE. Freedmen's Hospital school has a 3-year program.

REQUIREMENTS FOR ENTRANCE TO NURSING SCHOOL

Senator MONRONEY. Do you have to turn down many applicants who seek to go into nursing because you do not have the space and the available teaching facilities there?

Dr. BURBRIDGE. No, we do not, Senator. Actually, the requirements for admission are so stringent that it is difficult to get a very well-qualified class. We have been able in the past few years to fill our classes approximately to the top, but we have had no year in which we had more qualified applicants than we had spaces.

Senator MONRONEY. Does it require a B.S. from a college to enter?

Dr. BURBRIDGE. No, sir. It is high school and then there are certain qualifying examinations that the girls must take.

Senator MONRONEY. Since it seems to offer a wonderful professional career for so many people, why is there not a greater number of applicants who by proper examination you find to be qualified?

Dr. BURBRIDGE. Most of our students come from the southern schools and the standardized examinations that they have to take of course may be a little bit too hard for some of these girls who have not had the opportunities of education in the Southern States as they may have had in other parts of the country. That is one reason.

The second reason is that although nursing is a very attractive career for young women, there are other attractive careers for young women in the scientific field. They are going into medicine now, into law, and even into engineering. Therefore nursing is in competition for real good talent with other professions and avocations.

Senator MONRONEY. Thank you very much.

Dr. BURBRIDGE. No. 3, coordination and integration of hospital programs with preventive medicine through the operation of outpatient clinics and cooperation with governmental and voluntary health and welfare agencies.

4. Fundamental research in medical sciences through the integration of the work of the preclinical scientist and the clinician. During fiscal year 1958 25 research projects, financed through grants to Howard University were in progress in the hospital.

SOURCE OF FINANCING

The financing of the programs at Freedmen's Hospital is made possible by funds received from the following sources:

1. Federal Government, through direct appropriation.
2. District of Columbia government and other legal jurisdictions for the care of their indigent patients.
3. Individuals, through direct payment or through third party plans.

NURSE-SUPERVISOR TRAINING PLAN

Senator HILL. Excuse me a minute. This committee last year put an appropriation of some \$6 million in the bill for this fiscal year for the training of nurses for supervisory jobs and for teaching positions. You get benefit from these funds, do you?

Dr. BURBRIDGE. I actually don't know, Senator, whether any of our nurses have applied.

Mr. KELLY. I do not believe so, sir, because this ordinarily would go to a school that has a program beyond the graduation from nursing with an RN degree for service and administrative training.

Senator HILL. This is for supervisory positions and for teaching posts. As you said, it would go to perhaps a little higher grade.

Dr. BURBRIDGE. I was answering the question in this manner. I thought you meant did any of the nurses on our staff benefit from this fund.

Senator HILL. That was my question. That is what I intended to ask anyway.

Dr. BURBRIDGE. I don't have this information.

Senator HILL. You might check it and supply it for the record.

Dr. BURBRIDGE. I certainly will.

(The information requested follows:)

To the best of my knowledge there were four registered nurses who have taken advantage of these funds in the past year.

INCREASE REQUESTED

Senator HILL. Thank you, Doctor.

Dr. BURBRIDGE. The 1960 estimates propose an increase of \$194,683, of which the amount of \$99,000 is in direct appropriation, the balance to be derived from reimbursements from non-Federal sources. These additional funds will be used in the following manner:

Mandatory increases: In fiscal year 1960 there are three mandatory items for which the hospital is requesting additional funds. Specifically (a) the annualization of the four new positions obtained in 1959, (b) an extra day of pay; (c) within-grade promotions for Howard University personnel. These three items total \$23,734.

Senator BYRD. What was the figure you stated for the \$150,000?

Dr. BURBRIDGE. \$194,683.

Senator BYRD. Thank you.

Dr. BURBRIDGE. Program increases:

INCREASED STAFFING

The hospital is requesting six additional classified positions for 1960. Included are four nursing assistants and two clerical positions for the collection office.

The additional nursing positions, though not meeting the full requirements for this type of personnel, will improve the coverage presently available on the various wards and service areas of the general hospital.

The increases in collections over the past 10 years has placed more and more demands on the staff engaged in that activity. In order to meet the work requirements of this Office, which includes the filing of insurance claims, the submission of bills, the preparation of dunning letters, and the other followup procedures used on delinquent accounts, request is being made for two additional clerks.

Senator MONRONEY. Will not the increase in collections that now have to be charged off more than offset the added cost of the clerical help?

Dr. BURBRIDGE. They will.

Senator MONRONEY. In other words, you found from experience the earlier the bill is presented and more adequately followed up on, the better is your recovery, so that would not actually be an expense, but it would yield probably many, many times the additional cost.

Dr. BURBRIDGE. That is our feeling, yes, sir.

IMPROVEMENT OF DIAGNOSTIC FACILITIES

In fiscal year 1959, with the approval of this committee, the hospital was able to extend coverage in the clinical laboratories to 24 hours with additional personnel financed from increased reimbursements. Request is being made this year to further improve this important

adjunct to patient care by adding one bacteriology technician. It is also requested that the same 24-hour coverage allowed for the laboratories last year be extended to the X-ray department in fiscal year 1960 by the approval of four additional X-ray technicians. The total cost of these improvements amounts to \$20,705.

ADDITIONAL SUPPLIES AND MATERIALS

An increase of \$44,035 is being requested in order to support the purchase of supplies at the most current consumption and cost experiences. During the current fiscal year the hospital has been unable to purchase supplies at a level in keeping with consumption demands. Inventory levels will, therefore, be below acceptable standards. Additional funds for supplies are, therefore, being requested in order to relieve this situation.

NECESSARY IMPROVEMENTS IN PHYSICAL PLANTS

Due to the age and physical characteristics of the present general hospital, which is one of the last remaining outmoded hospital facilities in the city, maintenance costs are higher than they should normally be. A modest increase of \$15,000 is being requested to provide for repairs that cannot be performed by station personnel.

EQUIPMENT FOR PHYSICAL PLANT

The increase of \$20,617 being requested for the purchase of equipment is to provide funds for the replacement of obsolete, nonfunctional equipment, and the purchase of additional items that are needed to provide safe and adequate patient care.

Senator HILL. Do these additional \$99,000 take care of all these increases?

Dr. BURBRIDGE. Yes, sir.

Senator MONRONEY. Could I ask right there, how does your fire inspection look? Is there anything that has been found to be deficient in any of the fire inspections that there are not funds requested to correct?

Dr. BURBRIDGE. No, sir.

FIRE PROTECTION

Senator MONRONEY. You feel you do have good fire protection?

Dr. BURBRIDGE. We think so. We think we have good fire protection.

Senator MONRONEY. And it is inspected regularly and the corrections that are ordered made promptly?

Dr. BURBRIDGE. That is right.

Mr. KELLY. I think in that connection, Senator, it should be pointed out that this building is a very old building and it is obsolete and outmoded and we are hoping proposed legislation will be enacted transferring the hospital to the Howard University and a new plant built. This legislation has not as yet been enacted but we are very much in hopes of getting a new hospital to replace the old one.

Senator MONRONEY. What is the type of construction of the present one? Is it fireproof?

Dr. BURBRIDGE. It is fire-resistant construction.

Senator MONRONEY. By that you mean mill construction that is sprinklered, or is it all masonry?

Dr. BURBRIDGE. It is all masonry of course on the outside, but there are many wood fittings on the inside. This building is as well protected, we feel, as we can protect the building as it is, but it certainly does not have all the protections that the modern structures have.

In concluding this statement it should be pointed out to the committee that no requests are being included in these estimates for major changes either of a physical or program nature. This is due to the unsettled status of the ownership and control of the institution. It is hoped that the future of Freedmen's Hospital will soon be decided one way or the other so that the necessary development of this important community agency may continue.

Senator HILL. Any other questions?

Senator MONRONEY. I would like to ask a question or two off the record.

(Off the record.)

TRAINING OF NEGRO DOCTORS

Dr. JONES. I might say that possibly half of the Negro doctors who have been trained in this country have received their education at Howard University or Meharry in Nashville. It might readily be said that while I am certain that integration in medical schools is progressing, it is progressing very slowly. It is not contemplated in the near future that many Negro physicians will be from sources other than Howard and Meharry. So we, in our judgment, will be supplying for some time a very large percentage of the Negro physicians, nearly 50 percent. Now that we have initiated classes of 100 instead of 75, we will have an output of physicians that will be approximately 50 percent of the Negro graduates of medicine, notwithstanding the additional trainees at other institutions. Specifically, I think that is the story.

MEDICAL SCHOOL ENTRANCE REQUIREMENTS

Senator MONRONEY. Isn't it true because of scarcity of the plants in many of our medical schools the requirement of almost a Phi Beta Kappa level from the major university limits all students and they must be cut down drastically in the numbers that can find admission to all medical schools?

Dr. JONES. You mean Negro physicians?

Senator MONRONEY. No; I am talking about everybody now. There are many, many students who do not rank among the tiptop of the class, although they have the desire to become doctors, and are not admitted by the university because of the limited number of facilities in the medical schools that can take students.

BETTER STAFFS NEEDED

Dr. JONES. My understanding is that the same quantity of applicants exists, but that the quality is less than in former days. For example, I think that college graduates of the Phi Beta Kappa type are seeking training as engineers and in other scientific areas in such large

numbers that the lower echelon in the graduating classes of colleges are becoming applicants for medicine. So far as I understand, all medical classes are being filled. Those at our school are being filled, though the number of applicants has dropped off from 1,200 to about 600. We must select about 100 of these applicants but the quality of the men is not quite as high as it used to be. It therefore leads one to feel that we really must have a better teaching staff of the medical school in order to effect equal quality of training. With regard to the hospital, I think I might like to add this particular feature: That with respect to medical care of patients in our hospital, built on the pavillion style, as characteristic of the 19th century, our wards, for example, have 28 beds and we have actually about three toilets for 28 people. As the needs and requirements of hospital care increase, enlarged nursing service is required. Modern nursing in our obsolete plant requires more nursing personnel. Since our budget requires that patients pay for the cost of care, it means that our rates will have to be very high.

Now we are faced with an \$18 to \$21 a day rate for ward and room patients who must share services, with 28 to 32 patients using a lavatory with three commodes in it and four washbasins. It does not seem logical and practical that we should continue to up our rates for that sort of accommodation.

Senator MONRONEY. In regard again to the inability of many Negro students to find a chance to go to other medical schools, part of that goes back to the lack of basic education, lack of university education, and quality of education, so many of them cannot be admitted to Harvard or some of the greater medical schools, even though the schools have no integration bar against it. They simply have been handicapped by lack of higher education in many parts of the country. Is that not a fact?

LACK OF BASIC EDUCATIONAL EXPERIENCE

Dr. JONES. If you ask me, I would say that is absolutely true, but I would say further that we are faced with the difficulty of selecting people with potentials in education. We select them on the basis of their experience and we are faced with and have to use as our guide the medical aptitude test. In many instances this examination tests the experience of one and the culture in which he has lived. The way these examinations are framed indicate many times the Negro applicant has not had the type of experience which would make him live up to and get the grades in his medical aptitude which normally are had by others in other cultures. I think if we analyze the findings of the medical aptitude test we will find the Negro applicant is way down on the list, but we think he is not there because he does not have potential ability. We think he is there because he is graded in an area in which he has no or little experience.

Senator HILL. In other words, he hasn't had the opportunity to reach that state to have better understanding.

Dr. JONES. I think that is substantially it, but questions are asked in which he has had no experience while the other group has because of its cultural training.

For example, one of the simple questions asked in a medical aptitude test, for which the Negro has had very little experience, was concerned

with certain detailed information which could only be gained by traveling in a pullman car. These youngsters very likely have never seen a pullman car, and in the experience of the other group the pullman car has been used commonly as a mode of travel. This is simply just one example.

Senator HILL. Where did you graduate?

Dr. JONES. I was born in Washington and all of my education has been here.

NEED FOR NEGRO DOCTORS

Senator MONRONEY. To wrap this up, then, there is a vast need for more Negro doctors?

Dr. JONES. There is—very definitely.

Senator MONRONEY. And nurses?

Dr. JONES. We have some States where we have 1 Negro physician to some 15,000 people. In Washington we have 1 physician to 800 people.

Senator MONRONEY. And Meharry and Freedmen and Howard produce more than 50 percent of the present Negro doctors?

Dr. JONES. They produce 95 percent together.

Senator MONRONEY. Therefore, if we wish to better this ratio it is at Howard University and Meharry that we can expect to do it within the shortest period of time?

Dr. JONES. Yes, sir.

Senator HILL. Any other questions, gentlemen?

If not, we thank you all very much. We are glad to have had you here with us. Thank you very much.

GALLAUDET COLLEGE

STATEMENT OF DR. LEONARD W. ELSTAD, PRESIDENT; ACCOMPANIED BY DR. ALBERT ATWOOD, CHAIRMAN, BOARD OF DIRECTORS; C. CLEVELAND GIDDINGS, ASSISTANT TO THE PRESIDENT; DR. GEORGE DETMOLD, DEAN; LLOYD JOHNSON, BUSINESS MANAGER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“For the partial support of Gallaudet College, including personal services and miscellaneous expenses, and repairs and improvements, as authorized by the Act of June 18, 1954 (Public Law 420), **[\$815,000]** \$892,000: *Provided*, That Gallaudet College shall be paid by the District of Columbia, in advance at the beginning of each quarter, at the rate of \$1,295 per school year for each student attending and receiving instruction in elementary or secondary education pursuant to the Act of March 1, 1901 (31 D.C. Code 1008).”

Amounts available for obligation

	1959 appropriation	1960 budget estimate	1960 House allowance
Appropriation or estimate	\$849, 000	\$892, 000	\$904, 000
Advances and reimbursements—			
From other accounts	10, 000	10, 000	10, 000
From non-Federal sources	304, 915	332, 181	332, 181
Unobligated balance no longer available	—5, 337	-----	-----
Total available for obligation	1, 158, 578	1, 234, 181	1, 246, 181

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. General administration.....	11	\$87,489	12	\$89,749	12	\$89,749
2. Residential instruction and departmental research:						
(a) Gallaudet College.....	71	503,037	81	569,504	81	569,504
(b) Kendall School.....	18	91,409	18	94,870	18	94,870
3. General library.....	6	63,943	6	65,540	6	65,540
4. Operation and maintenance of physical plant.....	40	229,564	41	231,382	41	231,382
5. Auxiliary services and noneducational expenses.....	32	183,136	32	183,136	32	195,136
Total positions and obligations.....	178	1,158,578	190	1,234,181	190	1,246,181

Obligations by objects

	1959 estimate	1960 estimate	1960 House allowance
Non-Federal employees:			
Total number of permanent positions.....	178	190	190
Full-time equivalent of all other positions.....	5	5	5
Average number of all employees.....	177	189	189
Number of employees at end of year.....	178	190	190
01 Personal services:			
Permanent positions.....	\$841,824	\$915,804	\$915,804
Positions other than permanent.....	20,000	23,000	23,000
Other personal services.....	500	500	500
Total personal services.....	862,324	939,304	939,304
02 Travel.....	5,200	5,200	5,200
03 Transportation of things.....	1,500	1,500	1,500
04 Communication services.....	5,000	7,000	7,000
05 Rents and utility services.....	15,500	19,500	19,500
06 Printing and reproduction.....	250	250	250
07 Other contractual services.....	55,453	49,453	49,453
08 Supplies and materials.....	141,409	141,409	153,409
09 Equipment.....	40,000	33,662	33,662
11 Grants, subsidies, and contributions.....	54,800	59,698	59,698
15 Taxes and assessments.....	762	825	825
Subtotal.....	1,182,198	1,257,801	1,269,801
Deduct quarters and subsistence charges.....	23,620	23,620	23,620
Total obligations.....	1,158,578	1,234,181	1,246,181

New positions requested

	Number of positions	Annual salary
Non-Federal Employees—ungraded positions:		
General administration: Junior financial clerk.....	1	\$4,000
Resident instruction and departmental research:		
Assistant professor.....	1	6,000
Instructor.....	2	9,000
Assistant to dean of students.....	1	5,400
Assistant to dean of men and dean of women.....	4	13,600
Secretary.....	2	8,000
Total, resident instruction and departmental research ¹	11	46,000
Operation and maintenance of physical plant:		
Laborer.....	1	3,500
Total new positions—all activities.....	12	49,500

¹ The budget request also includes an increase of \$3,000 for three part-time instructors.

Summary of changes

	Positions	Amount
1959 actual appropriation.....	178	\$849,000
Deduct nonrecurring items:		
Other contractual services.....		—15,000
Equipment.....		—15,000
1960 base.....	178	819,000
1960 appropriation request.....	190	892,000
Net change requested.....	+12	+73,000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases for program items:				
Strengthening of instructional and supervisory program.....	8	\$35,800	8	\$35,800
Additions to administrative and clerical staffs.....	3	12,000	3	12,000
Addition to operation and maintenance and auxiliary services staffs.....	1	3,500	1	3,500
Part-time positions (3).....		3,000		3,000
Within-grade salary increases for faculty.....		22,680		22,680
Research program—services of informants.....		5,000		5,000
Communications services.....		2,000		2,000
Utilities services.....		4,000		4,000
Contractual services.....		4,000		4,000
Additions to equipment:				
Preparatory science department.....		2,500		2,500
Hearing and speech center.....		6,162		6,162
Increased retirement and group life insurance contributions.....		4,961		4,961
Additional supplies.....				12,000
Total program increases.....	12	105,603	12	117,603
Less increase in funds from non-Federal sources.....		32,603		32,603
Total change requested.....	12	73,000	12	85,000

EFFECT OF HOUSE ACTION

The House report adds \$12,000 to the budget request for supplies and materials, auxiliary services and noneducational expenses. The major portion of this sum would be used to cover the costs of food for an estimated increased enrollment of 41 students. Based on a daily average per student cost of 78 cents (the highest monthly cost during the present year) for the school year of 268 days, the additional costs will amount to \$8,570. The balance of \$3,430 would be applied to meet costs of dormitory and other household supplies related to increased enrollments.

PREPARED STATEMENT

Senator HILL. Dr. Elstad of Gallaudet College.

Doctor, we are glad to have you. We welcome you back, Doctor. You may put your statement in the record, and you may proceed in any way you see fit, sir.

(The statement referred to follows:)

STATEMENT OF PRESIDENT, GALLAUDET COLLEGE ON SALARIES AND EXPENSES
GALLAUDET COLLEGE

Gallaudet College is the only college of higher learning in the world exclusively devoted to the education of the deaf. The institution was organized in 1857 and has been supported in part by annual Federal appropriations since its inception. It possesses unique responsibilities and opportunities. The Congress has recognized these responsibilities by the passage of Public Law 420 (83d Cong.)

which amended the charter of the college and defined its relationship with the Federal Government. A total appropriation of \$892,000 is requested for the fiscal year 1960.

ACCREDITATION

The endeavors of a decade reached fruition on May 1, 1957, when the college gained accreditation. This resulted from accelerated expansion plans for curriculum and physical facilities. This is a continuing program.

RESEARCH PROGRAM

The basic purpose of this program is to exploit the unique opportunities of the college in becoming a national clearinghouse and research center concerned with problems associated with deafness.

Two research studies were begun in 1957-58. The establishment of a central research index on sociological and psychological aspects of deafness and a project on the structural analysis of the language of signs. Both of these projects were initially reviewed and approved by a research advisory committee appointed by the National Institutes of Health. These studies will continue through the 1960 fiscal year.

THE HEARING AND SPEECH CENTER

The hearing and speech center has been organized to provide (1) diagnostic and training services, (2) graduate courses and clinical practice related to teaching the hearing impaired, and (3) research in hearing and deafness.

Complete audiological assessments (hearing tests) are provided for each student in the preparatory and Gallaudet College population. Further examinations are performed to determine feasibility and proper selection of wearable hearing aids. Special tests of speech proficiency and speech reading (lip reading) ability are also employed.

All students in the preparatory class and in the college proper are provided with special classes in communication. Each student is provided training in speech, speech reading, and training in the use of amplification units according to his needs. The students are grouped for assistance in communication skills according to the results of the diagnostic evaluation in the receptive and expressive communication areas.

SERVICES

Graduate students are provided with courses in audiology through the center. In addition to course work, clinical practice and classroom observation are made available to these graduate students.

At Gallaudet College each year, three or four groups of vocational rehabilitation counselors are sponsored by the Office of Vocational Rehabilitation, Department of Health, Education, and Welfare, to receive special courses in the orientation to the deaf. The hearing and speech center staff provides them with an introductory course in the detection and treatment of hearing impairment.

Summer session for graduate students is also available at Gallaudet College. In the hearing and speech center, courses on a graduate level in audiology are provided for those actively engaged in the education of the deaf, those working toward advanced degrees, as well as those working in related fields.

Research in hearing and deafness is carried on in the center. Initial emphasis is being placed upon the measurement and therapeutic approaches to receptive and expressive communication and language handicaps accompanying hearing impairment. Basic data relative to the age of onset of deafness, etiology, residual hearing, speech-reading ability, speech proficiency, and finger spelling have been collected and are used in relationship to projects in research.

Excellent library facilities include the Edward Miner Gallaudet Memorial Library and the central index of research on the deaf on the college campus, and governmental libraries, such as the Library of Congress, the Department of Health, Education, and Welfare Library, and the National Library of Medicine.

KENDALL SCHOOL

The Kendall School is the laboratory teaching school for the college department of education. Teacher supply for schools for the deaf in the Nation is a serious problem. Gallaudet College has recognized this situation by increasing the enrollment in the teacher-training program.

The school provides education at the primary and secondary level for deaf public school children from the District of Columbia and other areas. This department is the original school and its centennial was celebrated in November 1957.

REQUESTS FOR 1960 INCREASED FUNDS

Increases are requested for fiscal year 1960, offset partially by nonrecurring costs in 1959, are as follows:

Salary increases.—Within-grade salary increases limited to grade maximums already established are requested for faculty in the amount of \$22,680. The present salary scale of the college is based on 1951-52 mediums of salaries paid in similar institutions in this region and provides for within-grade increases similar to those awarded in the Federal Government to recognize satisfactory service of staff members. It is important that this amount be made available so that the college will more nearly be able to retain and attract competent personnel.

To strengthen the faculty staff and administration, the sum of \$54,300 is requested for the employment of four additional instructors, four assistants, two secretary-stenographers, one clerk, and one maintenance employee.

An annual report to the Middle States, etc., is required each year until 1961 to indicate our progress in augmenting staff and course offerings to enable us to maintain our accredited standing. The additional personnel requested is a part of this requirement. Secretarial help is necessary to do the office work in our expanded program. Additional buildings mean additional service employees.

Employee benefits.—Public Law 362 (81st Cong.) extended the Civil Service Retirement Act to employees of Gallaudet College. In addition, Public Law 935 (84th Cong.) provided coverage for Gallaudet College employees under the Federal employees group life insurance program. An increase of \$4,961 is requested for these purposes in 1959.

Operation and maintenance.—Two major buildings now under construction, the classroom-laboratory building and the speech and hearing center, should be completed during the spring of 1959. The cafeteria, union building, and men's dormitory are expected to be completed by the beginning of the fall term of 1959. To care for these buildings and for their protection, and to strengthen this department, additional funds in the amount of \$10,000 are requested to care for the expanding physical plant of the college.

Other increases.—The sum of \$8,662 is requested for additional equipment in the educational department.

SALARIES AND EXPENSES

Mr. ELSTAD. I have a short summary statement.

Gallaudet College, the only higher educational institution devoted exclusively to the education of the deaf, has been supported by Federal appropriations since 1857.

The Federal support in recent years for the operation of the research, instructional, and teacher preparation programs of the college and for the construction program was instrumental in aiding the college to attain full accreditation by the Middle States Association of Colleges and Secondary Schools in 1957.

1960 REQUEST

The budget request for 1960 will provide increases designed to strengthen the college programs and continue support for activities initiated in earlier years. The total request of \$892,000, together with reimbursements in the amount of \$342,181 will permit increases in the amount of \$105,603 for the following purposes:

\$4,961 to cover such mandatory costs as retirement and group life insurance;

\$22,680 to provide within-grade salary increases for faculty personnel within the framework of the existing salary scale;

\$8,662 for education equipment;

\$54,300 for 12 new positions; namely, 4 additions to faculty, 4 assistants to dean of men and women, 2 secretary-stenographers, 1 clerk, 1 laborer, and 3 part-time laboratory instructors;

\$5,000 for continuation of linguistic research program and \$10,000 to cover increased operating costs, including communications and utilities.

These increases are offset in part by nonrecurring costs of \$30,000 in 1958.

RESEARCH

A broad program of research into the many new phases of the problems of the deaf was initiated at Gallaudet in 1958. It is planned to carry the research program forward in 1960, with continued emphasis on two major projects: The Central Index on Research for the Deaf, which is primarily engaged in indexing, abstracting, and summarizing research literature on problems of deafness, and the linguistic research project, which is devoted to the scientific analysis and description of the language of signs.

CONSTRUCTION

APPROPRIATION ESTIMATE

"For [the preparation of plans and specifications for construction and equipment] *alteration, renovation, and other improvement* of buildings and facilities on the grounds of Gallaudet College, as authorized by the Act of June 18, 1954 (Public Law 420), under the supervision of the General Services Administration, **[\$123,000]** *including planning, architectural, and engineering services, \$150,000, to remain available until [June 30, 1960, as follows: For an auditorium; a classroom and dormitory building, Kendall School; greenhouses; athletic fields, and stands; maintenance building; maintenance personnel apartments; and alterations, installations, equipment, roads, walks, and grading]* *expended.*"

Amounts available for obligation

	1959 appropriation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$123, 000	\$150, 000	\$300, 000
Unobligated balance brought forward.....	2, 542, 020	187, 854	187, 854
Total available for obligation.....	2, 665, 020	337, 854	487, 854

Obligations by activities

	1959 appropriation	1960 budget estimate	1960 House allowance
Design, supervision, etc.....	\$195, 666	\$42, 016	\$52, 016
Construction.....	2, 281, 500	160, 838	300, 838
Major repairs and preservation of buildings and grounds.....		135, 000	135, 000
Total obligations.....	2, 477, 166	337, 854	487, 854
Unobligated balance.....	187, 854		
Total obligations and balance.....	2, 665, 020	337, 854	487, 854

Summary of changes

1959 actual appropriation.....	\$123, 000
Deduct nonrecurring items.....	123, 000
1960 base.....	
1960 appropriation request.....	150, 000
Net change requested.....	+150, 000

	1960 budget estimate	1960 House allowance
Increases:		
Renovation and repair of existing buildings.....	\$150, 000	\$150, 000
Construction of athletic field.....		150, 000
Total change requested.....	150, 000	300, 000

EFFECT OF HOUSE ACTION

We are very pleased that the Congress and the executive branch has been so generous with Gallaudet College in its expansion program. The construction that has been completed and the staffing of the college has enabled it to become accredited. We do appreciate the fact that for economical reasons the President has recommended no additions to our building program in the 1959-60 budget, but we were pleased to learn that the House committee had recommended a modest sum for the completion of playing fields for the physical education program and a slight increase in our operations budget. These additions will be of great assistance in our program for the 1959-60 school year, if granted.

I also have a statement on the item, "Construction, Gallaudet College," that I will be glad to place in the record.

Senator HILL. That will be placed in the record.

(The statement referred to follows:)

STATEMENT OF PRESIDENT, GALLAUDET COLLEGE, ON CONSTRUCTION,
GALLAUDET COLLEGE

CONSTRUCTION PROGRAM

Congress has approved a master development plan for the expansion of the physical plant and facilities at Gallaudet College. This plan has been developed with the dual aims (1) of providing more adequate facilities for all phases of the college program, and (2) of expanding the physical plant to accommodate an enlarged student body.

The sum of \$6,462,000 has been appropriated thus far for the first three stages of the building program. These appropriations made funds available for six buildings and related equipment, grading, and outside services. In addition, in fiscal year 1959, \$123,000 was appropriated for the purpose of developing plans and drawings for those remaining projects in the overall construction program.

CURRENT STATUS OF CONSTRUCTION PROGRAM

The current status of all stages of the program is as follows:

The women's residence hall and the physical activities heating plant building are almost fully completed and are in use.

The classroom science building, which is included in the second stage of the building program, is substantially completed and was opened for use during the current fiscal year. Also included in the second stage is the speech and hearing center; this project is approximately seven-eighths complete and is expected to be opened in the near future.

The cafeteria and service building and the men's dormitory projects, both of which are in the third stage of building program, are approximately one-half complete and are expected to be ready for use in the first semester of the next academic year.

Related equipment, grading, and outside services are approximately two-thirds complete.

It is also anticipated that plans and drawings for the remaining projects of the construction program will be completed by the close of the current fiscal year.

NEED FOR ALTERATION AND RENOVATION OF OLDER EXISTING BUILDINGS

The college has recently conducted a survey of the condition of the older buildings on its campus. Many of these buildings are structurally sound and suitable for preservation and can be adapted to play an important, continuing part in the overall programs of the college. However, these buildings, while basically sound, are in an advanced state of disrepair and in some cases need adaptation to make them fully usable.

If prudent and selective care is taken at this time, many years of service can be derived from their continuing use. Such deficiencies as primitive and potentially dangerous lighting systems, inadequate heating, plumbing and ventilation, and defects in outside walls and roofs need to be corrected in order to avoid intensive damage.

COSTS OF ALTERATION AND RENOVATION

Preliminary studies indicate that a full program of major repair, preservation, and renovation projects will require appropriations of \$700,000 to \$1 million. It is planned to approach these needs on a multistage basis.

1960 REQUEST

In 1960, \$150,000 is requested to initiate this renovation and repair program. This amount would be applied to alteration and renovation of two buildings: College Hall and Residence No. 1. These two projects have been assigned first priority because of the degree of current disrepair and because there is a continuing need for these facilities in the future.

College Hall, for which \$130,000 is requested, will be used primarily as a men's dormitory. Extensive renovation is necessary to make it safe and habitable and to provide it with facilities adequate to meet the hygienic needs of the students.

Residence No. 1, for which \$20,000 is requested, provides quarters for the president and his family, four bachelor instructors, and visitors to the college. It has rarely been touched by alterations in its 88 years of use.

It is considered that the two projects here recommended will constitute a first step in the overall program of renovation and repair, which will eventually bring the older part of the campus up to an acceptable standard.

GENERAL STATEMENT

Mr. ELSTAD. The second stage of the construction program, consisting of the classroom-science building and the speech and hearing center, is nearing completion. The cafeteria and service building and the men's dormitory, making up the third stage, are expected to be ready for use in the fall.

For 1960, funds in the amount of \$150,000 are requested for the renovation and repair of two of the older buildings on the campus. The two projects are the first step in a program designed to rehabilitate and reclaim our older buildings, and to adapt them to the new functions they will assume as the newer buildings become ready for use.

EXPANSION PROGRAM

We are very pleased that the Congress and the executive branch has been so generous with Gallaudet College in its expansion program. The construction that has been completed and the staffing of the college has enabled it to become accredited.

We do appreciate the fact that for economical reasons the President has recommended no additions to our building program in the 1959-60 budget, but we were very pleased to learn that the House report adds \$12,000 to the budget for supplies and materials, auxiliary services, and noneducational expenses.

Then the amount of \$150,000 was added to the budget request for construction of playing fields in our physical education program which has no facilities because of grading and excavation for new construction.

That is a summary of the report given you.

Senator HILL. Doctor, we gave you funds last year for the making of the plans for your auditorium, did we not?

Mr. ELSTAD. Yes.

Senator HILL. And the elementary school building?

Mr. ELSTAD. Yes.

Senator HILL. And the athletic field and staff?

Mr. ELSTAD. That is right.

Senator HILL. There is no money in this bill now for those items. Have your plans been completed?

Mr. ELSTAD. They will be completed as of July 1.

Senator HILL. But there are no funds for any of this construction?

Mr. ELSTAD. No, sir.

PLAYING FIELDS

Our main concern, of course, is the playing fields. In regrading the whole 92 acres, they have left not a green blade of grass, so there isn't a place for a single athletic activity.

We have to go in the parks around the campus, and at best it would take a year to get a new field sodded and the grass sown; if the program is postponed another year, it will be 2 years.

Senator HILL. That is your playing fields?

Mr. ELSTAD. Yes, sir.

Senator HILL. How much would it cost?

Mr. ELSTAD. The House allowed \$150,000 for that. With that we could do it.

Senator HILL. In other words, if \$150,000 as allowed by the House is retained in the bill, you could meet this need?

Mr. ELSTAD. We could.

Senator MONRONEY. Would that be related to your program?

It would be of continuing use?

Mr. ELSTAD. That is right.

Senator HILL. It is exactly what we contemplated when we gave you the \$122,000 for planning, is it not?

Mr. ELSTAD. There was an amount of \$285,000 for playing fields, but that contained stands with rooms underneath for shower baths and matters of that kind.

We would like to have a part of that, but for athletic fields. It wouldn't take \$285,000. We could do it for \$150,000.

Senator HILL. With the amount put in by the House?

Mr. ELSTAD. Yes.

Senator HILL. And with the idea that you build these stands maybe at a later date?

Mr. ELSTAD. Smaller stands would be included, and there would be enough, I think, to put some storage space underneath, which would be satisfactory.

Senator HILL. The figure before me is \$285,000; \$150,000 is \$135,000 short.

Mr. ELSTAD. They had a seating capacity for 6,000 people. That provided for large facilities underneath, and that can be reduced so that \$150,000, I am sure, would be satisfactory for about 2,000 people.

Senator HILL. You think that would be adequate?

Mr. ELSTAD. I think so.

Senator HILL. In other words, you think then that if an additional \$150,000 were retained in the bill, that would adequately meet the situation so far as your athletic field is concerned?

Mr. ELSTAD. That is right.

Senator HILL. Senator Monroney?

STATES SENDING STUDENTS

Senator MONRONEY. You have students from many States, I believe. I have been out to the college.

Mr. ELSTAD. Forty-three States.

Senator MONRONEY. Could you put in this record the States supplying these students?

Mr. ELSTAD. Yes.

(The information referred to follows:)

GALLAUDET COLLEGE

Geographical distribution of student enrollment 1958-59

Alabama.....	6	Oregon.....	8
Arizona.....	8	Pennsylvania.....	20
Arkansas.....	2	Rhode Island.....	1
California.....	38	South Carolina.....	5
Colorado.....	1	South Dakota.....	3
Connecticut.....	13	Tennessee.....	2
Florida.....	6	Texas.....	12
Georgia.....	4	Utah.....	3
Idaho.....	5	Virginia.....	9
Illinois.....	13	Washington.....	9
Indiana.....	9	West Virginia.....	8
Iowa.....	9	Wisconsin.....	3
Kansas.....	3	Wyoming.....	1
Kentucky.....	4	District of Columbia.....	3
Louisiana.....	5	Territory of Hawaii.....	3
Maryland.....	5	Foreign:	
Massachusetts.....	1	Canada.....	12
Michigan.....	4	Colombia.....	1
Minnesota.....	15	Ghana.....	1
Missouri.....	4	Korea.....	1
Montana.....	11	Netherlands.....	1
Nebraska.....	5	Sweden.....	2
New Jersey.....	13	Vietnam.....	1
New Mexico.....	6		
New York.....	33	Enrollment:	
North Carolina.....	13	States and Territories.....	334
North Dakota.....	2	Foreign countries.....	19
Ohio.....	3		
Oklahoma.....	3	Total.....	353

TOTAL ENROLLMENT

Senator MONRONEY. I do not think we wish to name them, but I think by numbers it would be helpful to include its national aspects.

Mr. ELSTAD. There are 44 States.

Senator MONRONEY. Alabama had six.

Mr. ELSTAD. I added the States of the committee members. The students in those States represented in this committee are 91 students. California has 38.

Senator HILL. And your total enrollment, Doctor?

Mr. ELSTAD. Three hundred fifty-three this year and we are planning for four hundred fifteen this coming fall.

Senator MONRONEY. You always have more applications by far than you can possible fill?

Mr. ELSTAD. Yes; that has been true to date.

We are building for a possible enrollment of approximately 700.

TEACHER TRAINING

Senator MONRONEY. As a part of your courses, you also specialize in teachers for deaf schools elsewhere, do you not?

Mr. ELSTAD. Yes; that is right. They go back into State schools and teach in the high school departments. They can't teach little persons because a deaf person can't teach another person to speak, but they can teach in the high schools.

Senator HILL. If somebody has not had the privilege of visiting the institution, I want to say it is a very inspiring place to go.

Mr. ELSTAD. I wish you would come out now and see the new plant.

Senator MONRONEY. It was rather dilapidated many years ago. I know there have been some improvements.

Senator HILL. Are there any other questions?

Senator Byrd, do you have any questions?

Senator BYRD. No, sir.

Senator HILL. Doctor, we appreciate your being here and appreciate your statement very much.

Thank you.

Mr. ELSTAD. We appreciate being here; thank you.

HOWARD UNIVERSITY

STATEMENT OF DR. MORDECAI W. JOHNSON, PRESIDENT; ACCOMPANIED BY JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

SALARIES AND EXPENSES

"For the partial support of Howard University, including personal services and miscellaneous expenses and repairs to buildings and grounds, [\$3.953,700] \$4,617,000."

Amounts available for obligation

	1959 appro- priations	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$4, 350, 300	\$4, 617, 000	\$4, 617, 000
Advances and reimbursements from other accounts.....	375, 315	403, 902	403, 902
Reimbursements from non-Federal sources.....	3, 341, 794	3, 397, 437	3, 397, 437
Total available for obligation.....	8, 067, 409	8, 418, 339	8, 418, 339

Obligations by activities

	1959 appropria- tion		1960 budget estimate		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Program by activities:						
1. General administration.....	94	\$756, 506	94	\$782, 738	94	\$782, 738
2. Resident instruction and departmental research.....	725	4, 876, 312	756	5, 138, 801	756	5, 138, 801
3. General library.....	36	203, 556	37	228, 233	37	228, 233
4. Operation and maintenance of physical plant.....	165	1, 001, 744	165	1, 039, 276	165	1, 039, 276
5. Auxiliary enterprises and noneducational expense.....	144	1, 229, 291	144	1, 229, 291	144	1, 229, 291
Total obligations.....	1, 164	8, 067, 409	1, 196	8, 418, 339	1, 196	8, 418, 339

Obligations by objects

	1959 appro- priation	1960 budget estimate	1960 House allowance
Total number of permanent positions.....	960	992	992
Full-time equivalent of all other positions.....	213	213	213
Average number of all employees.....	1, 173	1, 205	1, 205
Number of employees at end of year.....	1, 515	1, 547	1, 547
01 Personal services:			
Permanent positions.....	\$4, 911, 598	\$5, 190, 868	\$5, 190, 868
Positions other than permanent.....	824, 706	824, 706	824, 706
Other personal services.....	5, 550	5, 550	5, 550
Total personal services.....	5, 741, 854	6, 021, 124	6, 021, 124
02 Travel.....	80, 304	80, 304	80, 304
03 Transportation of things.....	3, 573	3, 573	3, 573
04 Communication services.....	54, 109	54, 109	54, 109
05 Rents and utility services.....	121, 800	121, 800	121, 800
06 Printing and reproduction.....	59, 798	59, 798	59, 798
07 Other contractual services.....	374, 606	401, 206	401, 206
08 Supplies and materials.....	830, 438	841, 228	841, 228
09 Equipment.....	269, 561	297, 255	297, 255
11 Grants, subsidies, and contributions.....	418, 039	421, 213	421, 213
12 Pensions, annuities, and insurance claims.....	20, 147	20, 147	20, 147
15 Taxes and assessments.....	93, 180	96, 582	96, 582
Total obligations.....	8, 067, 409	8, 418, 339	8, 418, 339

232 LABOR-HEALTH, EDUCATION, WELFARE APPROPRIATIONS

New positions requested

Non-Federal employees	Grade	Number of positions	Annual salary
Resident instruction:			
Professor.....		3	\$28,312
Associate professor.....		5	37,157
Assistant professor.....		3	19,063
Instructor.....		7	42,188
Laboratory technicians, clerical and technical assistants.....	GS-4	8	30,040
X-ray technicians.....	GS-5	5	¹ 20,200
Total resident instruction.....		31	176,960
University libraries: Librarian.....	GS-6	1	4,490
Total new positions, all activities.....		32	181,450

¹ Reimbursable positions in Freedmen's Hospital.

APPROPRIATION ESTIMATE

PLANS AND SPECIFICATIONS

"For [the preparation of plans and specifications for construction] a survey of a steam and electrical production and distribution system, under the supervision of the General Services Administration, on the grounds of Howard University, [of a physical education building, \$123,000] \$21,000, to remain available until [June 30, 1960] expended."

Amounts available for obligation

	1959 appropriation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$123,000	\$21,000	\$21,000
Unobligated balance brought forward.....	76,355	8,267	8,267
Total available for obligation.....	199,355	29,267	29,267

Obligations by activity

	1959 appropriation	1960 budget estimate	1960 House allowance
Law school building.....	\$2,000		
Physical education building.....	168,210		
Home economics building.....	20,878		
Survey of steam and electrical production and distribution.....		\$21,000	\$21,000
Total obligations.....	191,088	21,000	21,000
Unobligated balance.....	8,267	8,267	8,267
Total obligations and balance.....	199,355	29,267	29,267

Obligations by objects

	1959 appropriation	1960 budget estimate	1960 House allowance
02 Travel.....		\$500	\$500
06 Printing and reproduction.....	\$9,000		
07 Other contractual services.....	182,088	20,500	20,500
Total obligations.....	191,088	21,000	21,000

APPROPRIATION ESTIMATE

"CONSTRUCTION OF AUDITORIUM-FINE ARTS BUILDING (LIQUIDATION OF CONTRACT AUTHORIZATION)

"For payment of obligations incurred under authority previously provided, to enter into contracts for the construction of the auditorium-fine arts building, \$860,000."

Amounts available for obligation

	1959 appropriation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	(\$163,000)	(\$860,000)	(\$860,000)
Unobligated balance brought forward.....	1,388,825	535,000	535,000
Contract authorization (new).....			
Total available for obligation.....	1,388,825	535,000	535,000

Obligations by activities

	1959 appropriation	1960 budget estimate	1960 House allowance
Men's dormitory.....	\$282,025		
Unobligated balance carried forward.....	535,000	\$535,000	\$535,000
Unobligated balance no longer available.....	571,800		
Total obligations and balance.....	1,388,825	535,000	535,000

PREPARED STATEMENT

Senator HILL. Dr. Johnson, Howard University.

We welcome you back, sir. We will be glad to have your statement appear in the record in full and then we will be happy to have any statement you see fit to present, sir.

Dr. JOHNSON. Mr. Chairman, I would like to present for the record the historical background statement.

Senator HILL. Good. We will be glad to have it.

(The statement referred to follows:)

STATEMENT OF THE PRESIDENT OF HOWARD UNIVERSITY

Mr. Chairman and members of the committee, on behalf of the trustees and faculties of Howard University, I wish to thank you and the entire membership of Congress for making available to Howard University the 10 percent salary increase which was last year voted for the employees of the Federal Government. This increase has exercised a highly constructive effect upon our entire salary system, and, coming as it does so closely upon the recently voted increase of \$500,000 in the annual appropriation, the completion of the preclinical medical building, and the steadily advancing construction of our auditorium-fine arts building, it gives unequivocal evidence of the purpose of the Congress to make Howard University a first class university service in every way. I wish again to express to you our strong gratitude for the privilege of enjoying your confidence and support in this great purpose.

SALARIES AND EXPENSES

The budget estimates for 1960 respectfully request the appropriation of \$4,617,000 toward the operation of the university during the year. This request represents an increase of \$266,700 above the appropriation of \$4,350,300 for the fiscal year 1959, intended to provide for the following four items:

I. For the accommodation of increased enrollment and the improvement of instruction. \$185,348 less \$55,643 increase in student fee income-----	\$129, 705
II. For the improvement of the university libraries-----	19, 490
III. For 2 basic staff benefits-----	117, 505
IV. Emergency repairs and renovations to the physical plant designed to halt progressive deterioration (reappropriation)---	(53, 704)
Total of increase-----	266, 700

Emergency repairs and renovations to halt accumulated deterioration to the physical plant \$53,704

The last of these four items is a request for the reappropriation of the sum of \$53,704 which last year the Congress voted to support the continuing program to overcome accumulated deterioration in the physical plant. The full accomplishment of this purpose is now in sight. After this requested sum of \$53,704 is used the remaining needs will be reduced to \$77,216. This means that the entire accumulation of deterioration in the plant can be brought under control by the end of the school year 1961.

Two basic staff benefits, \$117,505

The third item of \$117,505 is designed: (1) to bring the within-grade salary increases for nonteaching employees, inaugurated at Howard University by the Congress in 1957, into up-to-date functioning (\$90,905); and (2) to establish group life insurance for teaching and nonteaching employees (\$26,600).

In 1957 the policy decision was made to establish the within-grade system of salary increases for nonteaching employees of Howard University, and the first step in the system was adopted and approved in the 1957 appropriation. The sums required for implementing the second and third steps in 1958 and 1959 could not be included in the appropriation ceilings. Steps two, three, and four are due to be implemented, therefore, in the 1960 appropriation.

The appropriation requested for this implementation is of major importance, both in the internal life of the university and in our relations with Freedmen's Hospital. There is now a difference between the salaries of Howard University nonteaching employees and Freedmen's employees ranging from \$765 to \$1,680 for the same classification of work. This difference was noted with grave concern by the House committee considering the bill to transfer Freedmen's Hospital to Howard University. Responsible members of this committee are of the opinion that all but insuperable difficulties in the areas of efficiency and morale would be involved in the maintenance of two such widely differentiated scales of salary in the same institution. They hesitated to vote their approval of the pending bill until this and kindred matters could receive their further consideration.

The approval of the \$90,905 for the implementation of steps two, three, and four will confirm the within-grade system policy of Howard already agreed upon by the Congress, and will operate to clear the way for the passage of the important Freedmen's Hospital bill now pending.

Kindred considerations operate to support the request here made for the approval of \$26,600 to provide group life insurance protection for the regular teaching and nonteaching employees of Howard University, comparable to life insurance protection afforded Government employees under the Federal employees' group life insurance of 1954. This appropriation will provide a much needed insurance protection for Howard University employees and will facilitate the efficiency, the internal unity and morale of the whole group of nonteaching employees, now soon to be more than doubled by the pending union with Freedmen's Hospital.

For the improvement of the university libraries, \$19,490

A first-class university requires (1) a substantial book collection; (2) adequate current funds for such additional books as are required to keep the book collection active and up to date; and (3) an adequate number of professionally trained librarians to make these books available to the students in the best

possible way. The 39 scientists and scholars who surveyed Howard University in 1954 found our libraries deficient in all 3 respects. The sum of \$19,490 here requested, is designed to make a beginning of planned and steady improvement in this determinative area of our university life.

For the accommodation of increased enrollment \$129,705 net

The Howard University full-time equivalent enrollment is steadily increasing, in response to increasing population, and in substantial accord with our long-term plan for its development. It is certain that the enrollment will increase by a minimum of 192 full-time students in 1960—of whom 81 will be in medicine and dentistry and 111 in the liberal arts ganglion, including engineering, liberal arts, the graduate school, pharmacy and music. The net sum of \$129,705 (\$185,348 less \$55,643 increase from student fees) here requested is designed to meet this increase with needed teaching and nonteaching personnel and supplies and equipment as near to the prevailing standards as possible. While in the justification the increases for teaching and nonteaching personnel and supplies and equipment are presented separately, it is to be emphasized that these three elements are indissolubly related and that they condition the efficiency of each other in a decisive manner. It is greatly to be hoped that the request will be considered as if the university were asking for 18 units of instructional power at an average cost of \$10,242 each, of which 68.2 percent or \$6,985 will be spent for the able teaching person 16.3 percent or \$1,670 for his necessary clerical, teaching and technical assistance, and 15.5 percent or \$1,587 for his indispensable teaching supplies and equipment.

In these days of increasing shortage of outstandingly able teachers, it is urgently necessary that each such teacher obtained shall have the nonteaching assistance, supplies and equipment to facilitate his powers on the highest efficiency level of which he is capable. The reasonableness of Howard University's request for 18 teachers may be judged by the actual need of new teachers which will exist in 1960, according to the prevailing ratio criteria in the university: In the liberal arts ganglion, 28 teachers; in medicine and dentistry, 31.8 teachers; in engineering and architecture, 8.2 teachers. Total teachers needed 68. Total teachers requested 18.

PLANS AND SPECIFICATIONS

Survey of steam and electrical production and distribution to meet the requirements of physical plant expansion \$21,000

We wish to thank the chairman and the members of this committee and the Members of the Congress for the planning appropriations which they have made to facilitate the erection of a new home economics building, and a new physical education building for men. It is expected that these plans and specifications will be completed by the end of the year 1959, with the result that the university will be ready for immediate construction thereafter, whenever Government policy conditions will permit the construction appropriations to be made.

The present request for \$21,000 for a survey of steam and electrical production and distribution to meet the requirements of physical plant expansion, presents an urgently necessary element of advance planning. The master development program for Howard University, in its text and by illustration, **recommends** certain expansions and additions to the facilities for the production of steam, and electrical production and distribution. Some elements of the building program have now developed to the point where it is necessary that a detailed study be made of the steam and electrical power additions which are about to become mandatory in the very early months. This is made especially necessary by the contemplated new plant for the Freedmen's Hospital. This survey will be applicable not only to the matter of new equipment, but it is important as it relates to present equipment, because some of the plant equipment is in the age of decline and cannot be operated safely at its originally rated capacity. The efficiency and the safety of the entire plant require that this survey of steam and electrical production and distribution be made at the earliest possible date.

CONSTRUCTION OF BUILDINGS

Liquidation of contract authorization for 1960 obligations on the auditorium-fine arts building now under construction, \$860,000

The construction of the auditorium-fine arts building was begun in April 1958, with the completion scheduled for December 1959. The construction is proceed-

ing steadily in a very satisfactory manner, and the schedule of estimated expenditures (given in the full justifications) shows that \$860,000 will be required during the fiscal year 1960 for the purpose of liquidating obligations incurred in the construction of this project, as provided in Public Law 639—80th Congress (approved June 14, 1948). The current erection of the long and urgently needed building is a continuing inspiration to the entire university community. For this we are deeply grateful to the chairman and members of this committee and to the Members of Congress as a whole.

FISCAL YEAR 1959 APPROPRIATIONS

Dr. JOHNSON. Perhaps I better read a brief statement.

Senator HILL. All right, Doctor.

Dr. JOHNSON. First of all, Mr. Chairman, I wish to thank you and the members of this committee for the very thoughtful attention given to Howard University last year and especially for the 10 percent salary increase which was put through Congress so shortly after the \$500,000 increase in the appropriation the previous year. It has operated to place us nearer the goals of really first-class operation than we have ever been and we are greatly gratified and deeply grateful to you.

Senator HILL. We are gratified to hear you say that, Doctor.

AMOUNT REQUESTED

Dr. JOHNSON. The sum of \$4,617,000 for salaries and expenses for Howard University represents a net increase of \$266,700 above the appropriation for the fiscal year 1959, intended to accomplish three major purposes as follows:

1. A net sum of \$129,705 to provide 18 of the 83.8 additional teachers needed in 1960, with the nonteaching assistants, supplies and equipment required to support their work.

2. \$19,490 for the general libraries of the university, to make a beginning of overcoming the deficiencies which were so vigorously criticized by the Middle States Association survey in 1954.

3. \$117,505 to provide (a) the implementation of the second, third and fourth steps of within-grade increases for nonteaching employees in accord with the policy approved by the Congress in 1957 (\$90,905), (b) group life insurance for the regular teaching and nonteaching employees (\$26,600).

The requested sum includes the reappropriation of \$53,704 for the retirement of accumulated deterioration in the physical plant—the last step but one required for the full accomplishment of this purpose.

PLANS AND SPECIFICATIONS

The sum of \$21,000 requested for plans and specifications is to provide an urgently needed survey of heat, light and power production and distribution facilities so as to discover the precise replacements and additions to equipment required to meet major additions to the physical plant now underway and pending.

The sum of \$860,000 requested under construction of buildings is required to liquidate contract authorizations on current construction of the auditorium-fine arts building, as provided in Public Law 639, 80th Congress, approved June 14, 1948.

Perhaps, Mr. Chairman, I should make rather clear the urgent teacher needs.

Senator HILL. I was going to ask you to do that, Doctor.

ADDITIONAL TEACHERS

Dr. JOHNSON. You will notice that I have said that this request of \$129,000 is to provide a modest addition of 18 teachers as over against a need of 83.8 additional teachers. We must keep in mind that Howard University is not only building a plant, but it is steadily accommodating the student body to be provided in that plant and that the rate of increase in the student body exceeds what we had expected. That itself is not abnormal because we are now under a pressure which affects all higher educational institutions and will affect them with greater intensity as we move toward 1965 and 1970.

Eight of the 18 teachers here requested will serve the liberal arts area.

Perhaps a little background would be good. In 1955, 154 teachers were needed to teach the students in the liberal arts ganglion. I refer not only to the liberal arts college. I refer to the ganglion. The liberal arts college is not merely a college, but it is a service institution. The liberal arts college serves 50 percent of all the students in pharmacy. It serves 43 percent of all the students in engineering and architecture. It serves 21.5 percent of all the students in music, and it serves all the students in graduate school plus all the students in the college of liberal arts. When therefore we are asking for teachers for the liberal arts ganglion we are asking for teachers to teach the whole group of liberal arts students involved in this ganglion.

In 1955 we needed 154 teachers to teach the students in this ganglion efficiently.

The university was able to secure 121 of these teachers. The situation became acutely worse in 1956 when 172.4 teachers were required and only 121 teachers were available.

In 1957, 183 teachers were required and only 120.1 were available. In 1958-59, however, as a result of the substantial appropriations approved by the Congress, the gap between the teachers needed and the teachers available has been substantially reduced. Out of the 189.5 teachers needed in 1959, the university was able to secure the employment of 170 teachers. An additional 19.5 teachers would have closed the gap entirely. That was the situation, Mr. Chairman, when we wrote this justification. The actual enrollment in the ganglion this year, instead of being 2,483, which we expected, is 2,761. That is 278 full-time students above the 2,483 expected during the year. This means an actual need of 210.8 teachers at a ratio of 13 to 1, and that, Mr. Chairman, is a modest ratio. It is a median ratio, not an exacting, first-rate ratio. This represents an increased need of 21.3 teachers. We have 175 of these teachers, leaving a net need now of 35.8 teachers. We are going to take 111 more students in this ganglion in 1960. That will be a need of 8 teachers more, or 43.8 teachers; so that if you appropriate the money for the teachers that we now request, we would still have a need of 35.8 teachers in this ganglion.

It is very important that I keep this before you, because, having made an increased appropriation of half a million dollars in order

to meet the requirements specifically set forth by the Middle States Association, we know that in a developing situation we will lose that gain if we don't go forward with a substantially even pace.

COST OF ADDITIONAL TEACHERS

Senator HILL. What would it cost for these additional teachers, Doctor?

Dr. JOHNSON. I think, sir, it would cost something around \$225,000. Now, touching the teachers in the medical school, there again we have a developing situation which is planned. None of this increased enrollment is running astray. It is contained in the banks of a river that has been dug beforehand and there is no overflowing. We are developing according to plans.

Senator HILL. I know how well you have planned, Doctor.

Dr. JOHNSON. Thank you.

TEACHER NEEDS IN MEDICAL SCHOOL

The full group of teachers needed in medicine and dentistry is 31.8 teachers. We are asking here for 8 of those teachers for medicine and dentistry. We need 10.8 teachers to bring up the deficiency of teaching personnel in the preclinical branches of medicine to the level of 63.8 teachers required. All of the preclinical students expected in the double enrollment of medicine and dentistry involved in our program will be present in 1959-60.

May I remind you again, Mr. Chairman, that we are trying to double the output of Negro physicians and dentists. How urgent this is may be emphasized by a single statement: That if the Negro people in the country were served by physicians at the same rates broadly prevailing among the majority group, we would need 15,000 more Negro physicians than we have. That is where we are now. We are producing them at a rate which barely takes care of those who die. We are not making headway at all.

Senator HILL. In other words, you are not at all keeping up with the continuous increase in the population.

Dr. JOHNSON. No, sir; not at all, sir.

Senator HILL. And have not been for some years.

STEPS IN COMPLETING TEACHER ROSTER

Dr. JOHNSON. That is true, sir. Now we need the total of 63.8 teachers who for satisfactory instruction should be present in 1959-60. The 10.8 of the 31.8 additional teachers needed are required for this purpose; 14 of the 31.8 teachers are needed in the clinical branches of medicine. For next year we shall reach the first of 2 years of swelling clinical enrollment and we will need, in order to teach that enrollment, to move over and take our position in the Gallinger Hospital. We will need six of these teachers in the department of medicine, two of them in the department of obstetrics and gynecology, one in the department of pediatrics, and five in the department of surgery. This is the first of two steps required to complete the personnel needed in the clinical branches of medicine to accommodate the 416 students planned to be fully present in 1961.

The second and last step for the provision of these teachers will be presented for approval in 1961. Seven of the full 31.8 additional

teachers needed are for the increased dental student body expected for 1960.

Our plan is to provide seven new teachers a year for 2 years in dentistry to take care of the planned increase in enrollment at the ratio of 1 teachers for 8 students. This is the ratio prevailing in State-supported dental schools in the United States. So that if you put this group together you can see that we are asking here for 8 teachers in medicine and dentistry at a cost of \$58,800, as over against a current need of 31.8 teachers.

ENGINEERING AND ARCHITECTURE

Let me speak a word about engineering and architecture. Mr. Chairman, I think that one of the things that would give this committee great satisfaction is to see the extent to which the school of engineering and architecture, which you placed in a sound position to do first-class work by building that new building, is now attracting the attention of the best employers of engineering talent in the United States. The great enterprises, like the General Electric Co. and the Navy, the Army, don't wait for our people to graduate. If I may use an amusing term, which is a matter of fact, they really stand in line waiting to interview possible prospective candidates, and practically every candidate for graduation who has anything approaching a high-grade mark mounts the platform with his diploma to be received in his right hand while his left hand is already on his contract for a new position. And these graduates are making good in every one of these areas. The returns come back to us and say that they do their work well, they deserve increases in rank and salary well, and the industry is delighted with them. This is the first accredited school of engineering and architecture ever substantially attended by Negroes in the history of the United States, made possible by the thoughtfulness of this committee, and I thought you would rejoice to see that it is being so well received.

Senator HILL. We are very much gratified, Doctor, very much gratified.

TEACHER NEED IN ARCHITECTURE AND ENGINEERING

Dr. JOHNSON. We are asking for two additional professional teachers in that area. The nonprofessional teachers are taken care of in the sum that I asked for in the liberal arts ganglion. But as this school goes forward it must have one by one an increase in the professional teachers of civil engineering, electrical engineering, mechanical engineering, and architecture. We are now in need of 8.2 additional teachers in this area. At the time when we are having the kind of competition that we are having in the world today, it is not good for the United States to teach engineering students with two teachers when eight teachers are required. So we beg you at least to give us these two teachers, while we pray for the coming of the others next time.

We are asking for eight laboratory technicians and assistants at a cost of \$30,000. This, too, is a very humble request in comparison with the need. Our actual need in this area is 39 laboratory technicians and assistants. The best way to present this kind of a justification really is not to present it this way. We ought to ask for units

of instruction, one teacher, two assistants, so much for material, supplies, and equipment. They are absolutely necessary for each other. If you have a first-class teacher and you don't get also the needed laboratory assistant, you are making an \$8,000- or \$10,000-man spend half of his time doing \$4,000 work. If you don't give him good supplies and equipment and he has to stumble around using blunt equipment or using substitutes for modern equipment, you are wasting his time then and wasting the teaching money. Therefore, we are presenting these things separately for clarity, but to give one without the other is really to withhold with the left hand what the right hand has done. Our need in both of these areas is very great.

For supplies and equipment we are asking for \$28,000 when our need is about \$119,300. I stated it this way so as not to prolong the justification when the need is so great. It is absolutely indispensable that we have \$28,000.

LIBRARIES

May I now go to the improvement of the libraries. It is here respectfully requested that the sum of \$19,490 be approved for personnel, books, and binding. The request includes one librarian for \$4,490 and \$15,000 for additions to the book collection. This request is based primarily on the critical report received from the Commission on Institutions of Higher Education of the Middle States in Maryland in 1955. This report pointed out four main deficiencies in our library.

1. The existing collection was inadequate for a university of the size, age, and purpose of Howard University.
2. The rate of acquisition was too slow.
3. Additional personnel was needed in critical places.
4. The necessary binding was greatly behind schedule.

This is approximately one-third of what we regard as a minimum urgent need.

WITHIN-GRADE INCREASE SYSTEM

Now, if you please, Mr. Chairman, I would like to call attention to a matter which is of very great importance and that is \$90,000 here set forth for putting in three steps of the within-grade increase system at Howard University. For years, Howard University has been seeking to have the within-grade system installed. Congress has always very promptly responded to the initiative of the executive branch of the Government in putting through at Howard University such salary increases as are put through in the Government, but we suffer from a situation which is a great strain on efficiency and morale. At Freedmen's Hospital, for example, which is the teaching hospital of Howard University, the 641 employees all have the within-grade system, whereas in Howard University employees working side by side with them and in the same laboratory have only 1 of the 9 grades of 11 or 12 grades of increase. They are aware of this every day. It makes an assault upon their morale and it is only the most well-organized person who can stand that from day to day without either leaving the service of the university or breaking down in his morale. Congress took account of that in 1957 and put in the first step of within-grade increases, but the ceiling in the succeeding years did not permit us to take steps 2 and 3, which are now overdue. This \$90,000

will take care of steps 2 and 3 and 4, two of them being overdue and the other one being due in 1960. We do greatly hope that the Congress will not hesitate to go forward with this and that it will take up step by step the entire situation. Suppose we take over Freedmen's Hospital, for example. We then bring all the difficulties connected with this differential in salaries within the university. What was an almost intolerable morale question will now become intolerable indeed.

Senator HILL. You are really bringing them right into your bosom.

Dr. JOHNSON. That is right. We bring them in in a wounded bosom unable to support what is necessary.

Now, 64.5 percent of the employees of Freedmen's Hospital are nurses. Nurses are in short supply in the country. If they see us unable to improve this within-grade system at Howard University they will become increasingly afflicted with a sense of insecurity and they will flow off from us just like water and break this wonderful project which we are now about to put through—break it down before it gets underway. This is a very important thing to be done, and we greatly hope that it will go forward.

GROUP INSURANCE

Similarly, the \$26,000 which we here ask for group insurance will have the same effect. The Freedmen's Hospital employees have and they share the benefits of group insurance. Howard University employees do not have it. For a sum of \$26,000 supplemented by the funds paid in by the employees themselves, we can make the system that is now operative in the Government operative for all of the 500 nonteaching employees of Howard University, and that will unify our situation and greatly help us to take over the Freedmen's employees as they should be.

HALTING DETERIORATION

I draw attention, again, Mr. Chairman, to the fact that \$53,000 for halting deterioration is reappropriation.

Senator HILL. This was in the bill for this year, was it not?

Dr. JOHNSON. That is right.

Senator HILL. And you are asking that we reappropriate it?

Dr. JOHNSON. That is right. The \$21,000 in plans and specifications may look a little strange to you at first sight, since we had that remarkably able study of the entire powerplant and electrical distribution system by the Public Buildings Service. That is a very able study. We now come to the place where we must face situations not contemplated by that survey. For example, if we take over Freedmen's Hospital we will not only have to maintain such of the old buildings in the plant as we may use for educational purposes, but we will have a new plant at a cost of approximately \$10 million which must be sustained. We have also the question of the deterioration of present boilers that have already passed their age. We need now a swift expert survey to examine the present equipment to see what condition it is in, what should be replaced, and what new equipment should be placed immediately in order to take care of these unexpected additions to the plant. We have confidence that it can be done by

the Public Buildings Administration. They are already acquainted with us, and the low rate here given is due to the fact that we know they are already thoroughly familiar, and have to give their attention only to the additional items not expected when they made the survey.

LIQUIDATION OF CONTRACT AUTHORITY

Senator HILL. The \$21,000 you mentioned will be sufficient to do this job?

Dr. JOHNSON. Yes, sir. The \$860,000 that we are asking for is for the liquidation of contract authority on the auditorium fine arts building. We are making splendid progress with the building. The builders seem to be trying to outdo their own schedule, for which we are glad, because we waited a long time.

Senator HILL. You waited a long time to get it.

Dr. JOHNSON. Certainly.

Mr. Chairman, I think that concludes what I would like to say.

Senator HILL. You are always most eloquent and most persuasive, Doctor.

Are there any questions, Senator Monroney?

Senator MONRONEY. I have no questions.

Senator HILL. Senator Byrd?

Senator BYRD. No, thank you.

Senator HILL. Thank you, Doctor, very, very much.

Dr. JOHNSON. Thank you, Mr. Chairman.

OFFICE OF EDUCATION

STATEMENTS OF DR. L. G. DERTHICK, COMMISSIONER OF EDUCATION; ACCOMPANIED BY JOHN F. HUGHES, EXECUTIVE OFFICER; AND JAMES H. PEARSON, ASSISTANT COMMISSIONER FOR VOCATIONAL EDUCATION

GENERAL STATEMENT

Senator HILL. We are glad to have you with us, Doctor.

Dr. DERTHICK. We are very happy to be here, Senator.

Senator HILL. We will be delighted to have you proceed in your own way, Doctor.

Dr. DERTHICK. Mr. Chairman and members of the committee, as you know, it is always a very encouraging experience to come up here, even though at times with your responsibilities you can't go all the way with us, because we know you are very sympathetic and interested. Particularly this year we come up with quite a sense of enthusiasm and gratification because a lot has happened since we were last before your committee, not only through the National Defense Education Act, but with other programs of the Office of Education.

Now, I have statements here that I would like to supply for the record. I, on the one hand, want to be sensitive to the pressures of your time and, on the other hand, with members of my staff, want to give you all the information that you need. And so perhaps I could proceed by just calling attention to a point or two and filing

the statement, rather than reading it and then being available for any questions that come to your mind.

Senator HILL. All right.

(The statement referred to follows:)

STATEMENT OF COMMISSIONER OF EDUCATION

Mr. Chairman and members of the committee, I welcome this opportunity to present to you the annual budget program for the Office of Education. At the pleasure of the committee, I would like to make a few general remarks and follow with more detailed statements on the individual items of our budget. You may be sure that we in the Office of Education fully appreciate the vital responsibility discharged by this committee. It is with a sense of deep gratification that we acknowledge the contributions the committee has made to our progress, and to the development of educational programs which are a source of pride and reassurance to the American people.

One of the most encouraging and exciting facts in education today is the emerging recognition by the Congress that the Federal Government has a proper role to play in partnership with the States in furthering educational progress. Along with the full realization of the dynamic force of education in building a stronger nation and providing a fuller life, has come an awareness of the importance of Federal leadership and assistance in these critical times.

Within a relatively short span of years we have seen the addition of programs for assistance to schools in federally affected areas, a White House Conference on Education, a program for cooperative research in education, a strengthened Office of Education staff, and most recently, the National Defense Education Act. Without the slightest infringement on the responsibility of States and localities for the conduct of their education programs the people have through their Congress enacted these significant measures which have strengthened many phases of our educational processes.

The Office welcomes this opportunity to be of service. The encouraging response we have received to the implementation of the National Defense Education Act has made it possible to overcome many administrative obstacles. This act stands as a new landmark in the series of historical pieces of Federal education legislation which began almost a hundred years ago with the first Morrill Act. The perceptive and renewed recognition by Congress of a clear national interest in education has deeply involved the Office in relationships with educational agencies, schools, colleges, and professional associations across the Nation. The splendid cooperation and assistance we have received at every point have made it possible for the Office staff to maintain a level of exertion usually possible only during periods of national crisis and world conflict.

These efforts are beginning to bear fruit. We have already announced the first awards of national defense fellowships—a true milestone in the strengthening of the teaching profession in America. Student loan programs in hundreds of colleges throughout the States are now in operation—in many cases for the first time—making it possible for thousands of talented and needy students to begin or continue their education.

Payments to States for the acquisition of equipment and strengthening of instruction in science, mathematics, and foreign languages will enable much progress to be made in these fields before the year is out. Likewise, the strengthening of counseling and guidance programs—through direct grants and training institutes—is fast taking form.

One of the features of the National Defense Education Act which is certain to have long-range impact on our national progress and security—the development of competency in foreign languages and cultures—is also progressing to the point where tangible results can be identified. Research projects in new educational media, such as television and motion pictures, have already been received by the Office in substantial numbers. New technical trainee programs in vocational education will be initiated this year as a result of title VIII of the National Defense Education Act. Modernized statistical services, leading to more reliable and uniform national statistics, have already been placed in operation in several States.

In summary, the concentration of forces under this new program is already beginning to produce results which point toward a stronger America through improved education.

While for the present our attentions may appear to be primarily focused on the National Defense Education Act, it would be a serious oversight if we were to fail to mention the important contribution of other Office functions to improve educational programs. For example, our work in the field of international education is of continuing critical importance, particularly the comparative studies of foreign education systems which appraise the developments and progress of other nations, friendly and otherwise. We should note that the research and study programs of the Office have been strengthened and that they will continue to render effective service in identifying educational needs and offering suggestions for workable solutions. The grant programs of the Office provide continuing support and stimulation to education in various essential ways.

We are at the service of the committee in explaining the budget requests submitted by the President.

VOCATIONAL EDUCATION

APPROPRIATION ESTIMATE

“For carrying out the provisions of section 3 of the Vocational Education Act of 1946, as amended ([20 U.S.C., ch. 2; 70 Stat. 1126] 20 U.S.C. 15j), and section 202 of said Act ([70 Stat. 925] 20 U.S.C. 15bb), section 4 of the Act of March 10, 1924 (20 U.S.C. 29), section 1 of the Act of March 3, 1931 (20 U.S.C. 30), the Act of March 18, 1950 (20 U.S.C. 31-33), and section 9 of the Act of August 1, 1956 ([70 Stat. 909] 20 U.S.C. 34), including [\$4,000,000] \$2,900,000 for extension and improvement of practical nurse training, and [\$228,000] \$180,000 for vocational education in the fishery trades and industry including distributive occupations therein, [\$33,750,081] \$32,602,801: *Provided*, That the apportionment to the States under section 3(a), (1), (2), (3), and (4) of the Vocational Education Act of 1946 shall be computed on the basis of not to exceed \$29,267,081 for the current fiscal year: *Provided further*, That the amount of allotment which States and Territories are not prepared to use may be reapportioned among other States and Territories applying therefor for use in the programs for which the funds were originally apportioned.”

Amounts available for obligation

Description	1959 appropriations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$33, 750, 081	\$32, 602, 081	\$33, 702, 081

Obligations by activities

	1959 estimate	1960 estimate	House allowance
Grants to States and Territories under George-Barden Act....	\$32, 468, 313	\$32, 427, 081	\$33, 527, 081
Other grants to Territories.....	175, 000	175, 000	175, 000
Total obligations.....	32, 643, 313	32, 602, 081	33, 702, 081
Unobligated balance-reserve for savings.....	1, 106, 768		
Total obligations and balance.....	33, 750, 081	32, 602, 081	33, 702, 081

Obligations by object

Object classification	1959 appropriation	1960 budget estimate	1960 House allowance
11 Grants, subsidies and contributions (total obligations)....	\$32, 643, 313	\$32, 602, 081	\$33, 702, 081

Summary of changes

	<i>Amount</i>
1959 actual appropriation.....	\$33,750,081
1960 appropriation request.....	32,602,081
Net change requested.....	-1,148,000

	1960 budget estimate	1960 House allowance
Decreases: For program items:		
Extension and improvement of practical nurse training.....	\$1,100,000	-----
Vocational education in the fishery trades and industry.....	48 000	\$48,000
Total change requested.....	1,148,000	48,000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$1,100,000 for "Promotion and further development of vocational education." As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee, the following statement is submitted in explanation of how this increase, if enacted, would be applied.

The House allowance of \$33,702,081 represents an increase of \$1,100,000, which would provide an amount of \$4 million for grants to the States for practical nurse training, the same amount which is available for this activity in the fiscal year 1959.

As stated by the Secretary when he appeared before the committee, such an increase would further contribute to inflation and weakening of the national economy. It is recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

246 LABOR-HEALTH, EDUCATION, WELFARE APPROPRIATIONS

*Allotment of funds to States and Territories under the George-Barden Act and acts extending benefits of the Smith-Hughes Act to Hawaii, Puerto Rico, and the Virgin Islands, fiscal year 1960*¹

State or Territory (1)	Total (2)	Agriculture (3)	Home eco- nomics (4)	Trades and industry (5)	Distributive occupations (6)
Grand total.....	\$29,522,081	-----	-----	-----	-----
Total, George-Barden Act..	29,267,081	\$10,241,611	\$8,197,416	\$8,225,912	\$2,602,142
Alabama.....	820,541	394,019	246,733	129,935	49,854
Arizona.....	144,431	40,000	47,831	41,600	15,000
Arkansas.....	611,068	328,089	183,375	68,512	31,092
California.....	1,335,742	251,722	293,475	618,172	172,373
Colorado.....	243,594	81,436	70,798	69,784	21,576
Connecticut.....	257,204	40,000	64,327	120,193	32,684
Delaware.....	135,000	40,000	40,000	40,000	15,000
Florida.....	436,398	96,883	137,276	157,115	45,124
Georgia.....	874,360	394,354	270,295	153,624	56,087
Idaho.....	171,455	68,266	48,189	40,000	15,000
Illinois.....	1,229,195	314,984	280,012	492,341	141,858
Indiana.....	765,955	273,394	226,118	202,383	64,060
Iowa.....	674,934	322,284	196,453	113,519	42,678
Kansas.....	433,950	181,625	130,776	90,526	31,023
Kentucky.....	835,280	398,536	266,797	121,997	47,950
Louisiana.....	581,409	232,988	173,754	130,972	43,695
Maine.....	180,743	53,940	63,343	48,460	15,000
Maryland.....	351,800	75,604	104,253	133,792	38,151
Massachusetts.....	506,367	40,000	104,852	285,140	76,375
Michigan.....	1,009,890	286,690	267,936	351,514	103,750
Minnesota.....	685,954	304,034	194,651	138,706	48,563
Mississippi.....	776,380	448,659	225,361	66,881	35,479
Missouri.....	828,351	354,410	218,219	191,329	64,393
Montana.....	158,274	55,529	47,745	40,000	15,000
Nebraska.....	340,432	160,121	100,885	57,843	21,583
Nevada.....	135,000	40,000	40,000	40,000	15,000
New Hampshire.....	135,000	40,000	40,000	40,000	15,000
New Jersey.....	513,246	49,061	93,073	292,379	78,733
New Mexico.....	158,201	54,552	48,649	40,000	15,000
New York.....	1,673,304	240,888	307,949	882,990	241,477
North Carolina.....	1,181,646	563,003	386,247	166,257	66,139
North Dakota.....	224,103	103,890	65,213	40,000	15,000
Ohio.....	1,262,479	354,674	339,580	438,832	129,393
Oklahoma.....	523,643	226,373	156,842	104,063	36,365
Oregon.....	299,722	94,294	100,658	79,998	24,772
Pennsylvania.....	1,513,084	291,771	443,765	606,611	170,937
Rhode Island.....	143,358	40,000	40,000	48,358	15,000
South Carolina.....	601,047	286,932	192,004	87,640	34,471
South Dakota.....	221,108	103,589	62,519	40,000	15,000
Tennessee.....	874,456	416,363	263,697	140,798	53,598
Texas.....	1,466,379	531,525	411,957	397,337	125,560
Utah.....	135,000	40,000	40,000	40,000	15,000
Vermont.....	135,000	40,000	40,000	40,000	15,000
Virginia.....	766,166	299,782	252,147	160,200	54,037
Washington.....	408,616	114,145	125,574	130,161	38,736
West Virginia.....	487,764	168,365	187,984	98,759	32,656
Wisconsin.....	729,610	298,706	207,429	167,551	55,924
Wyoming.....	135,000	40,000	40,000	40,000	15,000
Alaska.....	135,000	40,000	40,000	40,000	15,000
District of Columbia.....	144,728	40,000	40,000	49,728	15,000
Hawaii.....	139,441	44,441	40,000	40,000	15,000
Puerto Rico.....	736,273	441,690	188,675	69,912	35,996
Total, supplemental acts..	255,000	-----	-----	-----	-----
Guam.....	80,000	-----	-----	-----	-----
Hawaii.....	30,000	-----	-----	-----	-----
Puerto Rico.....	105,000	-----	-----	-----	-----
Virgin Islands.....	40,000	-----	-----	-----	-----

¹ Based upon U.S. Census of Population, 1950.

*Allotment of Federal funds to States and Territories for extending and improving practical nurse training under title II of the George-Barden Act and the budget estimate for the fiscal year 1960*¹

Total.....	\$2, 900, 000	New Hampshire.....	\$13, 359
Alabama.....	81, 194	New Jersey.....	50, 787
Arizona.....	14, 292	New Mexico.....	15, 654
Arkansas.....	60, 466	New York.....	165, 577
California.....	132, 175	North Carolina.....	116, 926
Colorado.....	24, 104	North Dakota.....	22, 175
Connecticut.....	25, 451	Ohio.....	124, 925
Delaware.....	13, 359	Oklahoma.....	51, 816
Florida.....	43, 183	Oregon.....	29, 658
Georgia.....	86, 520	Pennsylvania.....	149, 723
Idaho.....	16, 966	Rhode Island.....	14, 186
Illinois.....	121, 631	South Carolina.....	59, 475
Indiana.....	75, 793	South Dakota.....	21, 879
Iowa.....	66, 786	Tennessee.....	86, 529
Kansas.....	42, 940	Texas.....	145, 101
Kentucky.....	82, 653	Utah.....	13, 359
Louisiana.....	57, 532	Vermont.....	13, 359
Maine.....	17, 885	Virginia.....	75, 814
Maryland.....	34, 811	Washington.....	40, 433
Massachusetts.....	50, 106	West Virginia.....	48, 265
Michigan.....	99, 931	Wisconsin.....	72, 196
Minnesota.....	67, 877	Wyoming.....	13, 359
Mississippi.....	76, 824	Alaska.....	13, 359
Missouri.....	81, 967	District of Columbia.....	14, 321
Montana.....	15, 662	Hawaii.....	13, 798
Nebraska.....	33, 686	Puerto Rico.....	72, 856
Nevada.....	13, 359	Virgin Islands.....	3, 958
		Guam.....	

¹ Based upon "U.S. Census of Population, 1950."

*Allotment of Federal funds to States and Territories for vocational education in the fishery trades and industry and distributive occupations under sec. 2 of Public Law 1027, 84th Cong., and the budget estimate for the fiscal year 1960*¹

Total.....	\$180, 000	New Hampshire.....	
Alabama.....	1, 278	New Jersey.....	\$8, 064
Arizona.....	468	New Mexico.....	
Arkansas.....	29, 448	New York.....	6, 282
California.....		North Carolina.....	5, 040
Colorado.....	558	North Dakota.....	
Connecticut.....	4, 410	Ohio.....	1, 134
Delaware.....	8, 910	Oklahoma.....	
Florida.....	2, 880	Oregon.....	3, 312
Georgia.....		Pennsylvania.....	1, 170
Idaho.....	1, 080	Rhode Island.....	1, 962
Illinois.....		South Carolina.....	1, 278
Indiana.....	1, 188	South Dakota.....	
Iowa.....		Tennessee.....	576
Kansas.....		Texas.....	7, 902
Kentucky.....		Utah.....	
Louisiana.....	11, 934	Vermont.....	
Maine.....	11, 412	Virginia.....	10, 332
Maryland.....	7, 308	Washington.....	10, 746
Massachusetts.....	16, 020	West Virginia.....	
Michigan.....	1, 422	Wisconsin.....	1, 152
Minnesota.....	648	Wyoming.....	
Mississippi.....	3, 456	Alaska.....	16, 128
Missouri.....		District of Columbia.....	
Montana.....		Guam.....	
Nebraska.....		Hawaii.....	1, 296
Nevada.....		Puerto Rico.....	1, 206
		Virgin Islands.....	

¹ Based on the extent of the fishing industry in each State and Territory.

VOCATIONAL EDUCATION

Dr. DERTHICK. The first presentation we have has to do with vocational education, and you are thoroughly familiar with all of those programs, of which we are very proud.

(The information referred to follows:)

STATEMENT OF COMMISSIONER OF EDUCATION ON PROMOTION AND FURTHER DEVELOPMENT OF VOCATIONAL EDUCATION

All States and Territories are participating in the benefits of George-Barden funds for training in agriculture, distributive occupations, home economics, trades and industries, practical nursing and the fishery occupations. Most of the programs of vocational education are organized and operated by local boards responsible for public secondary education. These boards with the help of advisory committees of local interested persons determine for what occupations training should be given and often help in determining the content of such training. The school board makes available the necessary facilities, including equipment, and employs qualified teachers with practical experience in the field of the subject to be taught. In some States vocational training is also provided in State operated schools that serve a number of school districts.

All States maintain a staff of supervisors who are specialists in the fields of vocational education. These supervisors assist the local schools in maintaining effective programs. In addition, every State maintains a program for the training of vocational teachers.

Programs of vocational education are constantly being modified to keep up with technical progress and other changes in the occupations for which training is being given. This requires provisions for special conferences, workshops, technical courses, and new work experiences for teachers and the development of instructional materials. Such activities are conducted by the supervisors and teacher trainers.

Through the Federal-State-local cooperation high standards of instruction have been established and maintained. The total enrollment is now at an all-time high of more than 3½ million. About one-half of this enrollment is made up of those who attend day school full-time and the other half is made up of employed youth and adults. Accomplishments in and continuing needs for this program justify the requested amount of \$32,602,081.

The estimate of \$32,602,081 for 1960, represents a reduction of \$1,148,000 below the amount appropriated for 1959—\$1,100,000 in the amount for "Practical nurse training" and \$48,000 in the amount for "Fishery trades and industry." The sums requested for these programs, however, represent the same amounts being utilized in 1959.

TOTAL ENROLLMENT

Dr. DERTHICK. Incidentally, I notice that the total enrollment is about 3½ million now in these vocational programs, an alltime high. About half of them are full-time students and half of them part-time and adult students.

But in the presentation on vocational education, I believe there is only one issue, as I understand it, and that is the restoration on the part of the House of the full amount of \$4 million, the amount available this year for practical-nurse training, whereas in the President's budget we have asked for \$2.9 million on the ground that that is the amount estimated to be spent this year.

AMOUNT REQUESTED

If we have \$2,900,000, we will have a total expenditure equal to this year, and I believe the Secretary has stated the position of the administration on that matter and it is included in my statement, but in case you have any questions, we are here to try to answer them.

Senator HILL. The House raised the figure by a million dollars, did it not?

Dr. DERTHICK. \$1,100,000.

Senator HILL. Yes.

Senator MONRONEY. Is that all for nursing?

Dr. DERTHICK. Practical nurse training.

Senator HILL. We added a fifth category, as you will recall, by legislation, this category being for the practical nursing.

If you get that additional \$1,100,000, how will your program of practical nursing for the coming fiscal year compare to the program you are carrying on now, Doctor?

Dr. DERTHICK. It would be an increase of \$1,100,000 because the total expenditure for that program in 1959 is estimated to be \$2,900,000.

We have a table here showing the various allotments that would be made under the \$4 million and the \$2.9 million appropriations. Mr. Hughes might make a comment.

Senator HILL. All right, sir. We will insert that table in the record.

(The information referred to follows:)

Practical nurse training

State or Territory	Allotment based on appropriation of \$2,900,000	Allotment based on appropriation of \$4,000,000	State or Territory	Allotment based on appropriation of \$2,900,000	Allotment based on appropriation of \$4,000,000
Alabama.....	\$81,194	\$111,992	New Jersey.....	\$50,787	\$70,051
Arizona.....	14,292	19,713	New Mexico.....	15,654	21,592
Arkansas.....	60,466	83,402	New York.....	165,577	228,382
California.....	132,175	182,310	North Carolina.....	116,926	161,278
Colorado.....	24,104	33,247	North Dakota.....	22,175	30,587
Connecticut.....	25,451	35,105	Ohio.....	124,925	172,311
Delaware.....	13,359	18,426	Oklahoma.....	51,816	71,470
Florida.....	43,183	59,562	Oregon.....	29,658	40,908
Georgia.....	86,520	119,337	Pennsylvania.....	149,723	206,514
Idaho.....	16,966	23,401	Rhode Island.....	14,186	19,566
Illinois.....	121,631	167,767	South Carolina.....	59,475	82,034
Indiana.....	75,793	104,542	South Dakota.....	21,879	30,178
Iowa.....	66,786	92,119	Tennessee.....	86,529	119,351
Kansas.....	42,940	59,223	Texas.....	145,101	200,139
Kentucky.....	82,653	114,003	Utah.....	13,359	18,426
Louisiana.....	57,532	79,354	Vermont.....	13,359	18,426
Maine.....	17,885	24,669	Virginia.....	75,814	104,571
Maryland.....	34,811	48,016	Washington.....	40,433	55,770
Massachusetts.....	50,106	69,112	West Virginia.....	48,265	66,573
Michigan.....	99,931	137,835	Wisconsin.....	72,196	99,581
Minnesota.....	67,877	93,623	Wyoming.....	13,359	18,426
Mississippi.....	76,824	105,965	Alaska.....	13,359	18,426
Missouri.....	81,967	113,058	District of Columbia.....	14,321	19,753
Montana.....	15,662	21,602	Hawaii.....	13,798	19,032
Nebraska.....	33,686	46,464	Puerto Rico.....	72,856	100,491
Nevada.....	13,359	18,426	Virgin Islands.....	3,958	5,460
New Hampshire.....	13,359	18,426			

ALLOTMENTS UNDER APPROPRIATION

Mr. HUGHES. There are 23 States, sir, that would receive more funds in fiscal year 1960 with the appropriation of \$2,900,000 than they are getting and spending this year, whereas, on the other hand, there are 30 States which would receive less funds under that same appropriation.

EXTENDING AND IMPROVING NURSERY EDUCATION

Senator HILL. We have had some difficulty in our department.

I do not know the experience in Oklahoma and West Virginia. We felt we were penalized because we were doing a good job for ourselves.

The act spoke of extending and improving.

You are familiar with that, of course, Doctor?

Dr. DERTHICK. Yes, sir.

Senator HILL. Are you about to get that worked out?

Dr. DERTHICK. I think Mr. Pearson has made a great deal of progress in working that out.

May I ask him to speak on it?

Mr. PEARSON. Senator Hill, I think the problem in your State came about due to the fact that you had a program supported in part by the Kellogg Foundation. Then after the Kellogg Foundation funds were removed, the people immediately substituted State funds for the Kellogg funds.

Had they not done that at that particular time, it would have been rather easy for them to have picked up all of their money under Public Law 911.

I have been in touch with your State within the last few days and we are going to try to work out a plan where we can reconcile this problem that they have, and I think then after that is done they will be able to use to advantage their T. & I. money that has been going into practical nurse education.

It has been a real problem in several States. It hasn't been a handicap of expanding practical nurse education, but it has made it difficult for the States to use the money that they wanted to use on trade and industrial education because they wanted to keep up their program that had been developed previous to Public Law 911.

Dr. DERTHICK. As I understand it, Mr. Chairman, they had been using regular vocational funds under T. & I. for practical nurse training and they could not substitute these new funds for those.

Senator HILL. There were quite a few of those States, were there not?

Mr. PEARSON. Yes, sir.

There are several States that have that particular problem.

PROBLEM CREATED BY LANGUAGE

Senator HILL. You think you are about to work it out?

Mr. PEARSON. We cannot, as long as we have the language "extension and improvement", do anything but have some assurance that the States are using Public Law 911 for the extension and improvement of practical nurse education.

We will not be able to work it out to the satisfaction of all States.

It is rather interesting to note that as a result of this legislation there were in 1958 about 20,000 additional persons in practical nurse education, which meant that the funds were being used to extend and improve practical nurse education.

We have worked out a solution of the problem in a good many of the States, but we still have States that have this problem.

Senator HILL. You still have the problem?

Mr. PEARSON. Yes, sir.

Dr. DERTHICK. In other words, the act has achieved its purpose to increase the number of people in training by 20,000, but there has

been the problem of being sure that this new money goes for extension and improvement.

Maybe you could give the chairman and the committee an example, for example, in Alabama, how you have been able within the law to relieve the pressure.

Mr. PEARSON. We want to work again to interpret the Kellogg Foundation funds as private funds.

Therefore, when they would expand the program now, they wouldn't be in the same situation as though the Kellogg Foundation funds were State funds that had gone into the program. We have taken action in the State of Wisconsin. We have worked with them on ways they could use the funds for supervisors, for equipment, for teaching materials for which they had not used funds previously, and it is helping to relieve the situation there.

We are still, Senator Hill, trying to work with each State on its problem as an individual problem rather than trying to say that we can solve this problem by saying that you can use funds that you used previously for some other purpose and not have to use those funds now used for practical nurse education.

As long as we have the wording in the act, "extension and improvement", we feel that we have an obligation to see that our funds are used for that purpose.

SUMMARY OF POSITION

Dr. DERTHICK. I think we could summarize that point of view by saying that on the one hand, Mr. Pearson naturally has been conscious and faithful in administering the law, but I find when he gets around the table with these people, he finds procedures that are in harmony with the law that do relieve this pressure very materially, with reasonable interpretations that can be made.

Senator HILL. If you did not get this increase the House made of \$1,100,000, what would be the outcome of that now?

Mr. PEARSON. We would make the allotment against \$2,900,000 instead of \$4 million, and there would be 23 States that would get more money than they spent in 1959, but there would be 30 States that would get less money.

However, the total amount of money received by States for this program would be the same as spent in 1959.

Senator HILL. All right, Doctor.

FURTHER ENDOWMENT OF COLLEGES OF AGRICULTURE AND THE MECHANICAL ARTS
APPROPRIATION ESTIMATE

"For carrying out the provisions of section 22 of the Act of June 29, 1935, as amended (7 U.S.C. 329), \$2,501,500."

Obligations by activities

Description	1959 appropriations	1960 budget to Congress	1960 House allowance
Grants to States (total obligations)-----	\$2, 501, 500	\$2, 501, 500	\$2, 501, 500

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Amounts available for obligation

Description	1959 appropriations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$2, 501, 500	\$2, 501, 500	\$2, 501, 500

Obligations by objects

Object classification	1959 appropriations	1960 budget to Congress	1960 House allowance
11 Grants, subsidies, and contributions (total obligations)---	\$2, 501, 500	\$2, 501, 500	\$2, 501, 500

Allotment of funds to States and Territories for land-grant colleges and universities (colleges of agriculture and mechanic arts)

State or Territory	Total	Morrill-Nelson funds ¹	Bankhead-Jones funds ²		
			Total	Uniform grants	Variable grants ³
Total.....	\$5, 051, 500. 00	\$2, 550, 000	\$2, 501, 500. 00	\$1, 000, 000	\$1, 501, 500. 00
Alabama ⁴	100, 541. 43	50, 000	50, 541. 43	20, 000	30, 541. 43
Alaska.....	71, 283. 24	50, 000	21, 283. 24	20, 000	1, 283. 24
Arizona.....	77, 477. 26	50, 000	27, 477. 26	20, 000	7, 477. 26
Arkansas ⁴	89, 047. 71	50, 000	39, 047. 71	20, 000	19, 047. 71
California.....	175, 599. 47	50, 000	125, 599. 47	20, 000	105, 599. 47
Colorado.....	83, 218. 00	50, 000	33, 218. 00	20, 000	13, 218. 00
Connecticut.....	90, 022. 98	50, 000	40, 022. 98	20, 000	20, 022. 98
Delaware ⁴	73, 172. 96	50, 000	23, 172. 96	20, 000	3, 172. 96
Florida ⁴	97, 644. 26	50, 000	47, 644. 26	20, 000	27, 644. 26
Georgia ⁴	104, 360. 28	50, 000	54, 360. 28	20, 000	34, 360. 28
Hawaii.....	74, 985. 53	50, 000	24, 985. 53	20, 000	4, 985. 53
Idaho.....	75, 871. 76	50, 000	25, 871. 76	20, 000	5, 871. 76
Illinois.....	156, 905. 51	50, 000	106, 905. 51	20, 000	86, 905. 51
Indiana.....	109, 244. 59	50, 000	59, 244. 59	20, 000	39, 244. 59
Iowa.....	96, 145. 67	50, 000	46, 145. 67	20, 000	26, 145. 67
Kansas.....	89, 005. 70	50, 000	39, 005. 70	20, 000	19, 005. 70
Kentucky ⁴	99, 374. 97	50, 000	49, 374. 97	20, 000	29, 374. 97
Louisiana ⁴	96, 768. 55	50, 000	46, 768. 55	20, 000	26, 768. 55
Maine.....	79, 115. 06	50, 000	29, 115. 06	20, 000	9, 115. 06
Maryland ⁴	93, 371. 85	50, 000	43, 371. 85	20, 000	23, 371. 85
Massachusetts.....	116, 788. 72	50, 000	66, 788. 72	20, 000	46, 788. 72
Michigan.....	133, 559. 50	50, 000	83, 559. 50	20, 000	63, 559. 50
Minnesota.....	99, 750. 80	50, 000	49, 750. 80	20, 000	29, 750. 80
Mississippi ⁴	91, 735. 06	50, 000	41, 735. 06	20, 000	21, 735. 06
Missouri ⁴	109, 448. 37	50, 000	59, 448. 37	20, 000	39, 448. 37
Montana.....	75, 895. 57	50, 000	25, 895. 57	20, 000	5, 895. 57
Nebraska.....	83, 222. 20	50, 000	33, 222. 20	20, 000	13, 222. 20
Nevada.....	71, 596. 86	50, 000	21, 596. 86	20, 000	1, 596. 86
New Hampshire.....	75, 319. 18	50, 000	25, 319. 18	20, 000	5, 319. 18
New Jersey.....	118, 233. 27	50, 000	68, 233. 27	20, 000	48, 233. 27
New Mexico.....	76, 794. 96	50, 000	26, 794. 96	20, 000	6, 794. 96
New York.....	217, 933. 81	50, 000	167, 933. 81	20, 000	147, 933. 81
North Carolina ⁴	110, 518. 47	50, 000	60, 518. 47	20, 000	40, 518. 47
North Dakota.....	76, 180. 98	50, 000	26, 180. 98	20, 000	6, 180. 98
Ohio.....	149, 269. 02	50, 000	99, 269. 02	20, 000	79, 269. 02
Oklahoma ⁴	92, 278. 07	50, 000	42, 278. 07	20, 000	22, 278. 07
Oregon.....	85, 175. 65	50, 000	35, 175. 65	20, 000	15, 175. 65
Pennsylvania.....	174, 719. 55	50, 000	124, 719. 55	20, 000	104, 719. 55
Puerto Rico.....	50, 000. 00	50, 000			
Rhode Island.....	77, 899. 30	50, 000	27, 899. 30	20, 000	7, 899. 30
South Carolina ⁴	91, 117. 72	50, 000	41, 117. 72	20, 000	21, 117. 72
South Dakota.....	76, 512. 20	50, 000	26, 511. 20	20, 000	6, 511. 20
Tennessee ⁴	102, 835. 48	50, 000	52, 835. 48	20, 000	32, 835. 48
Texas ⁴	146, 920. 54	50, 000	96, 920. 54	20, 000	76, 920. 54
Utah.....	76, 871. 52	50, 000	26, 871. 52	20, 000	6, 871. 52
Vermont.....	73, 768. 09	50, 000	23, 768. 09	20, 000	3, 768. 09
Virginia ⁴	103, 104. 43	50, 000	53, 104. 43	20, 000	33, 104. 43
Washington.....	93, 730. 58	50, 000	43, 730. 58	20, 000	23, 730. 58
West Virginia.....	90, 005. 74	50, 000	40, 005. 74	20, 000	20, 005. 74
Wisconsin.....	104, 260. 50	50, 000	54, 260. 50	20, 000	34, 260. 50
Wyoming.....	72, 898. 08	50, 000	22, 898. 08	20, 000	2, 898. 08

¹ Continuing appropriation: Act approved Aug. 30, 1890, as amended; and act approved Mar. 4, 1907.² Authorized appropriation: Act approved June 29, 1935, as amended June 12, 1952.³ Based upon the U.S. Census of Population: 1950.⁴ The land-grant college for Negroes in this State receives a stipulated proportion of funds.

PREPARED STATEMENT

Dr. DERTHICK. Then the next item is on the land-grant colleges, the agricultural and mechanical arts colleges, and we have a statement here I would like to file.

Senator HILL. You may file that.

(The statement referred to follows:)

STATEMENT OF COMMISSIONER OF EDUCATION ON FURTHER ENDOWMENT OF COLLEGES OF AGRICULTURE AND THE MECHANIC ARTS

The colleges of agriculture and mechanic arts, generally known as land-grant colleges and universities, are maintained by the States and Territories in accordance with the First Morrill Act, approved July 2, 1862, and supplementary legislation. These institutions, now 68 in number, participate in a permanent appropriation amounting to \$2,550,000 a year. They also share in an annual appropriation of \$2,501,500 authorized by the Bankhead-Jones Act (1935 and 1952). We are requesting for 1960 a continuation of this annual appropriation in the same amount made in recent years. The appropriations, both permanent and annual, may be used by the institutions for instruction and for facilities for instruction in eight stated subjects.

The land-grant colleges and universities enroll about 675,000 students working for degrees and more than 76,000 other students. This enrollment is almost one-fifth of the total enrollment in higher education. Their total annual expenditures for current educational and general purposes exceed \$1½ billion, and for additions to physical plant about \$255 million.

*Allotment of funds to States and Territories for land-grant colleges and universities
(colleges of agriculture and mechanical arts)*

State or Territory	Total	Morrill-Nelson funds ¹	Bankhead-Jones funds ²		
			Total	Uniform grants	Variable grants ³
Total.....	\$5,051,500.00	\$2,550,000	\$2,501,500.00	\$1,000,000	\$1,501,500.00
Alabama ⁴	100,541.43	50,000	50,541.43	20,000	30,541.43
Alaska.....	71,283.24	50,000	21,283.24	20,000	1,283.24
Arizona.....	77,477.26	50,000	27,477.26	20,000	7,477.26
Arkansas ⁴	89,047.71	50,000	39,047.71	20,000	19,047.71
California.....	175,599.47	50,000	125,599.47	20,000	105,599.47
Colorado.....	83,218.00	50,000	33,218.00	20,000	13,218.00
Connecticut.....	90,022.98	50,000	40,022.98	20,000	20,022.98
Delaware ⁴	73,172.96	50,000	23,172.96	20,000	3,172.96
Florida ⁴	97,644.26	50,000	47,644.26	20,000	27,644.26
Georgia ⁴	104,360.28	50,000	54,360.28	20,000	34,360.28
Hawaii.....	74,985.53	50,000	24,985.53	20,000	4,985.53
Idaho.....	75,871.76	50,000	25,871.76	20,000	5,871.76
Illinois.....	156,905.51	50,000	106,905.51	20,000	86,905.51
Indiana.....	109,244.59	50,000	59,244.59	20,000	39,244.59
Iowa.....	96,145.67	50,000	46,145.67	20,000	26,145.67
Kansas.....	89,005.70	50,000	39,005.70	20,000	19,005.70
Kentucky ⁴	99,374.97	50,000	49,374.97	20,000	29,374.97
Louisiana ⁴	96,768.55	50,000	46,768.55	20,000	26,768.55
Maine.....	79,115.06	50,000	29,115.06	20,000	9,115.06
Maryland ⁴	93,371.85	50,000	43,371.85	20,000	23,371.85
Massachusetts.....	116,788.72	50,000	66,788.72	20,000	46,788.72
Michigan.....	133,559.50	50,000	83,559.50	20,000	63,559.50
Minnesota.....	99,750.80	50,000	49,750.80	20,000	29,750.80
Mississippi ⁴	91,735.06	50,000	41,735.06	20,000	21,735.06
Missouri ⁴	109,448.37	50,000	59,448.37	20,000	39,448.37
Montana.....	75,895.57	50,000	25,895.57	20,000	5,895.57
Nebraska.....	83,222.20	50,000	33,222.20	20,000	13,222.20
Nevada.....	71,596.86	50,000	21,596.86	20,000	1,596.86
New Hampshire.....	75,319.18	50,000	25,319.18	20,000	5,319.18
New Jersey.....	118,233.27	50,000	68,233.27	20,000	48,233.27
New Mexico.....	76,794.96	50,000	26,794.96	20,000	6,794.96
New York.....	217,933.81	50,000	167,933.81	20,000	147,933.81
North Carolina ⁴	110,518.47	50,000	60,518.47	20,000	40,518.47
North Dakota.....	76,180.98	50,000	26,180.98	20,000	6,180.98
Ohio.....	149,269.02	50,000	99,269.02	20,000	79,269.02
Oklahoma ⁴	92,278.07	50,000	42,278.07	20,000	22,278.07
Oregon.....	85,175.65	50,000	35,175.65	20,000	15,175.65
Pennsylvania.....	174,719.55	50,000	124,719.55	20,000	104,719.55
Puerto Rico.....	50,000.00	50,000			
Rhode Island.....	77,899.30	50,000	27,899.30	20,000	7,899.30
South Carolina ⁴	91,117.72	50,000	41,117.72	20,000	21,117.72
South Dakota.....	76,511.20	50,000	26,511.20	20,000	6,511.20
Tennessee ⁴	102,835.48	50,000	52,835.48	20,000	32,835.48
Texas ⁴	146,920.54	50,000	96,920.54	20,000	76,920.54
Utah.....	76,871.52	50,000	26,871.52	20,000	6,871.52
Vermont.....	73,768.09	50,000	23,768.09	20,000	3,768.09
Virginia ⁴	103,104.43	50,000	53,104.43	20,000	3,104.43
Washington.....	93,730.58	50,000	43,730.58	20,000	3,730.58
West Virginia ⁴	90,005.74	50,000	40,005.74	20,000	10,005.74
Wisconsin.....	104,260.50	50,000	54,260.50	20,000	34,260.50
Wyoming.....	72,898.08	50,000	22,898.08	20,000	2,898.08

¹ Continuing appropriation: act approved Aug. 30, 1890, as amended; and act approved Mar. 4, 1907.
² Authorized appropriation: act approved June 29, 1935, as amended June 12, 1952.
³ Based upon the U.S. Census of Population: 1950.
⁴ The land-grant college for Negroes in this State receives a stipulated proportion of funds

EXPENDITURES BY STATE INSTITUTIONS

Senator HILL. Is there any further question?

Senator MONRONEY. The amount, I notice, is the same as you have always spent. It is a great contribution and yields terrific returns on what the States spend.

I notice in your statement you point out that these State institutions spend around \$1½ billion on the educational programs in addition to the physical plant of over a quarter of a billion dollars.

Dr. DERTHICK. Yes; it is an excellent investment and a relatively small investment when we remember that these institutions enroll about one-fifth of the total population in the colleges.

Senator MONRONEY. It is a very great help in the scientific education, too.

I know the Oklahoma State University has gone forward in many fields of science.

Senator HILL. The same thing, I think, could be said about Auburn, Alabama Polytechnic Institute.

Dr. DERTHICK. I was a beneficiary of Auburn, Senator Hill, in architecture.

GRANTS FOR LIBRARY SERVICES

APPROPRIATION ESTIMATE

"For grants to the States pursuant to the Act of June 19, 1956, as amended [(70 Stat. 293-296, 911), \$6,000,000] (20 U.S.C. 351-358), \$5,150,000: *Provided*, That the amount of any State's allotment from this appropriation which such State certifies will remain unpaid to it on June 30, 1961, may be reallocated by the Commissioner among other States applying therefor in proportion to their rural population, and deemed part of such allotments, except that no State's allotment shall be so increased as to exceed the allotment which would be made to it were this appropriation equal to the maximum authorized under such Act."

Amounts available for obligation

	1959 appropriations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$6,000,000	\$5,150,000	\$6,000,000
Unobligated balance brought forward.....	563,326	1,186,866	1,186,866
Total.....	6,563,326	6,336,866	7,186,866

Obligations by activities

Description	1959 estimate	1960 estimate	House allowance
Grants to States and Territories (total obligations).....	\$5,376,460	\$6,336,866	\$7,186,866
Unobligated balance carried forward.....	1,186,866		
Total obligations and balance.....	6,563,326	6,336,866	7,186,866

Obligations by objects

Object classification	1959 appropriation	1960 budget estimate	House allowance
11 Grants, subsidies, and contributions (total obligations)....	\$5,376,460	\$6,336,866	\$7,186,866

<i>Summary of changes</i>		<i>Amount</i>
1959 actual appropriation.....		\$6, 000, 000
1960 appropriation request.....		5, 150, 000
Net change requested.....		—850, 000

	1960 budget estimate— amount	1960 House allowance— amount
Decreases: For program items: Grants to States and Territories.....	\$850, 000	-----

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$850,000 for "Grants for Library Services." As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee, the following statement is submitted in explanation of how this increase, if enacted, would be applied.

The House allowance of \$6 million represents an increase of \$850,000 above the President's budget, which would provide the same basic allotments to the States for "Grants for Library Services" as authorized in the current fiscal year.

As stated by the Secretary when he appeared before the committee, such an increase would further contribute to inflation and weakening of the national economy. It is recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

PREPARED STATEMENT

Dr. DERTHICK. In the request for grants for library services, perhaps I can point up the issue there by again saying we have a difference between the House action and the administration's recommendation, which was for the same total amount of funds as the appropriation last year which, you will remember, was for \$6 million.

(The statement referred to follows:)

STATEMENT OF COMMISSIONER OF EDUCATION ON GRANTS FOR LIBRARY SERVICES

The Library Services Act (Public Law 597, 84th Cong., as amended) is promoting the further development of free public library service in rural areas without such services or with inadequate services. The law authorizes an appropriation of \$7,500,000 annually through fiscal year 1961 and provides that allotments remaining unpaid to a State at the end of a fiscal year shall remain available to such State for a succeeding fiscal year. The appropriation for fiscal year 1959 is \$6 million.

It was estimated at the time the original estimate was submitted that approximately \$850,000 would remain unpaid to about 15 States at the end of fiscal year 1959. These funds would be available for payment to these States in fiscal 1960. As a result, \$5,150,000 was requested for fiscal year 1960, so that the total amount of money available in fiscal year 1960 would be the same as appropriated in 1959, namely \$6 million. The amounts to be allotted to the several States will be based on the appropriation plus any unused funds released by States for reallocation to other States.

Fifty States and Territories are participating in the program and making remarkable progress in extending and improving library services in the rural areas of the country where good books and other informational materials are so lacking. Over 800 rural counties across the Nation with more than 11 million people, now have new or improved public library services available under this

program. Some 30 of these counties had no library service within their borders prior to the Library Services Act. Approximately 130 bookmobiles have been purchased and placed in operation in rural areas. Over \$7 million has been expended under the program for books for rural children and adults.

State funds for public library service to rural areas have increased over 45 percent during the 3 years of the act—evidence of the stimulating effect of the program. State and local matching funds for Federal allotments under the 1959 appropriation of \$6 million exceed \$11 million.

Grants for library services

State or Territory	Authoriza- tion (1)	Funds re- quired for matching (2)	Available, 1959		Estimated obligations, 1959 (Federal) (5)	Budget estimate, 1960 (6)	House allowance, 1960 (7)	Estimated State match- ing funds available in 1960 (8)	Percent- age of required matching funds ¹ (9)
			From prior year (3)	1959 appro- priation (4)					
Total.....	\$7,500,000	\$6,738,796	\$580,562	\$6,000,000	\$5,521,892	\$5,150,000	\$6,000,000	\$12,208,424	-----
Alabama.....	207,576	106,933	-----	161,369	161,369	155,186	161,369	171,448	100
Arizona.....	72,485	54,415	-----	63,528	63,528	58,452	63,528	2 55,000	100
Arkansas.....	164,844	84,765	-----	130,203	130,203	110,743	130,203	193,341	100
California.....	239,822	398,530	-----	184,362	184,362	153,218	184,362	3,131,167	100
Colorado.....	88,084	82,160	-----	74,826	74,826	67,313	74,826	87,721	100
Connecticut.....	83,689	169,914	-----	71,643	71,643	64,816	71,643	2 170,000	100
Delaware.....	51,585	104,733	46,261	48,391	-----	46,580	48,391	-----	-----
Florida.....	133,235	108,571	35,080	107,527	130,925	92,959	107,527	144,552	100
Georgia.....	223,578	124,674	-----	172,959	172,959	144,275	172,959	492,041	100
Idaho.....	72,729	49,690	-----	63,704	84,292	58,591	63,704	57,662	100
Illinois.....	230,178	352,699	-----	177,739	177,739	148,024	177,739	427,651	100
Indiana.....	193,574	195,989	-----	151,229	-----	127,233	151,229	-----	-----
Iowa.....	173,427	130,192	9,505	136,636	105,849	115,788	136,636	2 130,000	100
Kansas.....	128,820	102,372	56,353	104,329	64,543	90,451	104,329	2 61,109	60
Kentucky.....	221,203	113,953	752	171,239	171,991	142,926	171,239	194,750	100
Louisiana.....	158,010	94,483	-----	125,470	125,470	107,031	125,470	2 95,000	100
Maine.....	83,021	59,382	-----	71,159	71,159	64,437	71,159	81,098	100
Maryland.....	110,806	125,858	31,603	91,283	76,000	80,219	91,283	143,410	100
Massachusetts.....	111,213	146,642	-----	91,577	78,000	80,450	91,577	105,642	76
Michigan.....	221,976	271,853	-----	171,799	171,799	143,365	171,799	348,387	100
Minnesota.....	172,203	143,882	-----	135,750	135,750	115,093	135,750	167,102	100
Mississippi.....	193,061	99,456	-----	150,856	150,856	126,941	150,856	2 100,000	100
Missouri.....	188,210	175,551	-----	147,343	134,010	124,185	147,343	2 135,000	77
Montana.....	72,427	66,642	-----	63,486	63,486	58,419	63,486	118,365	100
Nebraska.....	108,519	81,100	-----	89,626	89,626	78,920	89,626	88,280	100
Nevada.....	46,667	73,361	39,846	44,828	56,552	43,787	44,828	111,959	100
New Hampshire.....	62,051	52,582	-----	55,971	55,971	52,525	55,971	125,548	100
New Jersey.....	103,213	165,991	-----	85,783	85,783	75,906	85,783	169,746	100
New Mexico.....	73,042	48,715	-----	63,931	63,931	58,768	63,931	49,350	100
New York.....	249,152	418,637	-----	191,482	191,482	158,801	191,482	1,408,368	100
North Carolina.....	302,331	155,746	-----	229,997	229,997	189,007	229,997	435,446	100
North Dakota.....	84,291	47,270	-----	72,079	72,079	65,158	72,079	87,177	100
Ohio.....	270,635	339,041	-----	207,041	207,041	171,004	207,041	280,442	82
Oklahoma.....	146,523	98,868	-----	117,151	100,063	100,507	117,151	2 100,000	100
Oregon.....	108,365	102,832	-----	89,514	89,514	78,832	89,514	255,241	100
Pennsylvania.....	341,396	364,113	55,005	258,289	142,636	211,197	258,289	2 365,000	100
Rhode Island.....	52,142	53,816	46,247	48,794	45,902	46,897	48,794	2 54,000	100
South Carolina.....	170,405	87,784	-----	134,448	134,448	114,072	134,448	136,842	100

South Dakota.....	82,462	44,520	70,753	70,753	64,119	70,753	62,250	100
Tennessee.....	219,097	114,080	169,714	169,714	141,730	169,714	242,146	100
Texas.....	319,792	250,756	242,643	242,643	198,925	242,643	* 251,000	100
Utah.....	63,275	45,017	56,857	75,385	53,221	56,857	55,581	100
Vermont.....	63,385	44,670	56,937	56,937	53,283	56,937	154,232	100
Virginia.....	211,253	150,296	164,032	164,032	137,274	164,032	242,415	100
Washington.....	125,287	139,422	101,770	101,770	88,444	101,770	190,677	100
West Virginia.....	167,674	98,306	132,470	132,470	112,521	132,470	79,688	81
Wisconsin.....	180,882	164,576	142,036	132,450	120,023	142,036	* 165,000	100
Wyoming.....	54,209	53,221	50,291	40,000	48,071	50,291	20,606	81
Alaska.....	49,191	25,341	46,657	16,964	45,221	46,657	29,974	100
Guam.....	15,495	7,982	13,980	50,927	13,121	13,980	296,094	100
Hawaii.....	55,087	55,087	50,927	110,000	48,570	50,927	110,356	100
Puerto Rico.....	168,144	86,620	132,810	10,782	112,788	132,810	30,560	100
Virgin Islands.....	11,079	5,707	10,782		10,613	10,782		

¹ States which are shown as 100 percent have matching funds equaling or exceeding the amount necessary to match the authorization shown in col. 1.
² Estimates based on correspondence and reports from States as of May 21, 1959.

NOTE.—Estimates for all other States are based on matching funds available for fiscal year 1959.

ESTIMATE AND FUNDS AVAILABLE

Senator HILL. That is right.

Dr. DERTHICK. And \$5,150,000 we estimate will be spent actually, and then the \$850,000 would be available and carried forward, so we are asking for the same amount that was actually spent last year against the House increase, which would make it \$6 million.

Senator HILL. You mean if you got the \$6 million, you wouldn't spend the full amount?

Dr. DERTHICK. We didn't this year.

Of course, no one knows just exactly what we might do in 1960, but last year \$6 million was appropriated and \$5,150,000 we estimate will be spent, really not quite that much, because we estimate now that we will have a balance to carry forward of \$1,186,886.

Mr. HUGHES. The States have a second year to use the funds in this program, Mr. Chairman. Funds appropriated and made available this year are available for a second year.

AUTHORIZATION

Senator HILL. It is a 2-year program.

Of course, the authorization is for \$7,500,000.

Dr. DERTHICK. That is true.

Senator HILL. And it is a limited program.

Dr. DERTHICK. That is true. It is a 5-year program of \$7,500,000 each year. That is right.

Senator MONRONEY. If I understand you correctly, the unexpended balance as of the close of this fiscal year will still leave you with \$1,800,000 if the appropriation were at a level of \$5,150,000?

Mr. HUGHES. The \$5,150,000 would be augmented by an unexpended balance in the States of \$1,186,000, which would make a total available for 1960 of \$6,336,000.

QUESTION OF EXPANDING PROGRAM

Senator MONRONEY. The thing I am anxious to get at is, will this allow States who were not able at the start because of lack of matching funds to come in in numbers sufficient to afford a proper expansion of this program?

In other words, I do not want to see when States are ready that have not been able to avail themselves of it to run up against a ceiling of appropriations so we will have to say, "We are sorry, you have gone to this work of getting ready for this and appropriating your money, but now we have no Federal funds that can participate as the law promised we would."

Mr. HUGHES. That is right, sir.

The same problem exists here as in the practical nursing; that is, there would be some States that would end up with more money under this request and some States which would come out with less funds.

The number here is 13 States which would have more funds available to them next year than they are using this year, whereas there are 40 States who would end up with less funds next year than they are using this year, so in those 40 States the programs would have to go forward with State and local funds rather than Federal funds next year.

Senator MONRONEY. Just being practical, just where is Oklahoma? Are they in the 13 or in the 40?

Mr. HALL. Oklahoma had \$17,000-plus left over this year.

Oklahoma would gain \$444 over 1959 if we keep it at \$5,150,000.

Alabama, on the other hand, would lose \$26,000 if we keep it at that rate.

Alabama is one of the States which has met the maximum each time. There are 40 States which we anticipate meeting the maximum next year.

Oklahoma will get, since they had \$17,000 left over, about \$400-plus more dollars next year than is available this year.

Dr. DERTHICK. Alabama would get \$26,000 less because the allotment would be made against the \$5,150,000, instead of \$6 million.

EFFECT OF CUT IN ESTABLISHED FUNDS

Senator HILL. What you figure on is if the States could do and would do only what they did this year, but if they were prepared to go forward and you do not have the money there, they cannot do it?

Dr. DERTHICK. Except in 13 States, but there would be 40 States that could not go forward.

Senator HILL. Yes, unless we gave you the full \$6 million.

Dr. DERTHICK. That is right.

Senator MONRONEY. And the reason these States have not been able to go forward is because they have not yet arranged the matching funds, is that not correct?

Dr. DERTHICK. That is right.

However, I know that you would be interested to be reminded that this program has stimulated State and local expenditures in the amount of 45 percent.

Senator HILL. Their efforts are 45 percent greater than they were when this program started?

Dr. DERTHICK. That is right.

Dr. HALL. Last year when the appropriation was increased, many of the local districts began to help the States raise funds so that many of the funds now are being promoted at the local district level in order to get up to the maximum.

We think this is a trend and it is just becoming really effective in this whole library movement.

Senator HILL. It would seem to me to allow less than the \$6 million would be discouraging to the program throughout the States.

In other words, this \$6 million would certainly provide for these States to continue to make this progress in increasing their own funds which you say has been 45 percent up to date under the program.

All right, Doctor.

COMMUNICATION

Senator Clark has received a letter from Mr. Ralph Blasingame, Jr., Pennsylvania State librarian, requesting appropriation of the full amount authorized, \$7,500,000, for the library services program. The Senator has requested that Mr. Blasingame's letter appear in the record. It will be included at this point.

(The letter referred to follows:)

COMMONWEALTH OF PENNSYLVANIA,
DEPARTMENT OF PUBLIC INSTRUCTION,
STATE LIBRARY,
Harrisburg, March 10, 1959.

Hon. JOSEPH S. CLARK, Jr.,
The Senate, Washington, D.C.

DEAR SENATOR: The Library Services Act of 1956 authorizes Federal appropriations annually in the amount of \$7,500,000 to be allocated to the various States, on a matching fund basis, for the extension of library services to rural areas.

The fiscal year 1959 Federal appropriation under this act was \$6 million. The President's budget for fiscal year 1960 recommends that the appropriation be reduced to \$5,150,000 on the basis of an estimate that \$850,000 of Library Services Act funds appropriated in fiscal year 1950 will not be used by the States during the current fiscal year.

Pennsylvania is one of the States which will have a balance of unclaimed Federal funds at the close of the current fiscal year, but we will be able to claim and use these funds during the 1960 fiscal year, along with funds that would be available to Pennsylvania if the Library Services Act were fully funded by a \$7,500,000 appropriation in fiscal year 1960.

Pennsylvania's unclaimed balance of Library Services Act funds arises from (1) lack of a State librarian and adequate staff at the time the act was passed, and (2) the need for a thorough study of library conditions in Pennsylvania before a sound plan for the use of Federal funds could be developed. These conditions have now been corrected. We have an excellent professional staff and we have the benefit of a comprehensive and reliable survey of library service in our State. These accomplishments are in a large part a result of the stimulus provided through the Library Services Act. A summary of the survey findings is enclosed with this letter, and we will gladly furnish the full two-volume report if you wish.

A rural library service demonstration program has been carefully worked out for Pennsylvania in harmony with the recommendations of the Pennsylvania library survey. The State library budget now before the legislature provides sufficient matching funds to insure our ability to claim the existing Federal balance for Pennsylvania as well as Pennsylvania's share of a full Library Services Act appropriation of \$7,500,000. For these reasons I respectfully urge you to support the maximum appropriation allowable under the act, i.e., \$7,500,000 for the fiscal year 1960.

Sincerely,

RALPH BLASINGAME, Jr., *State Librarian.*

PENNSYLVANIA'S PUBLIC LIBRARIES—WHAT WE HAVE AND WHAT WE NEED

SUMMARY OF RECOMMENDATIONS OF THE PENNSYLVANIA LIBRARY SURVEY

A study of library service in Pennsylvania with a proposal for a statewide plan of public library development by Dr. Lowell A. Martin, Dean, Graduate School of Library Service, Rutgers University, with the assistance of an advisory committee appointed by the Pennsylvania Library Association

INTRODUCTION

Public library service should be the basic foundation for knowledge, human understanding, and constructive entertainment in the community. Beyond the high school and the university, the library is society's most effective weapon for continuing education.

Today, however, 2,161,526 Pennsylvanians lack local public library service.

Even those 5,771,527 citizens of the Commonwealth who have some library service actually are using facilities that are antiquated and grossly inadequate for meeting their subject and information needs.

An estimated 7,400,000 Pennsylvanians lack reasonable access to the specialized research materials they want and need.

A series of recommendations contained in the recently completed Pennsylvania library survey are aimed at correcting these and related deficiencies in library services.

A summary of those recommendations is given in this article. For those who wish to study the complete, two-volume survey report, copies may be found in each public library in Pennsylvania after January 1, 1959.

BACKGROUND OF THE SURVEY

A comprehensive study of Pennsylvania's public libraries was begun in October 1957. It was financed by funds from the Federal Government.

Dr. Lowell Martin, dean of the Graduate School of Library Service at Rutgers University, was director of the study, and Miss Grace Estes, formerly librarian of the Osterhout Library in Wilkes-Barre, served as assistant director. Mr. David Palmer, formerly with the Enoch Pratt Free Library in Baltimore, was executive secretary.

Reports of progress were made periodically during the year to an advisory committee of the Pennsylvania Library Association. These conferences, held in Harrisburg, also gave the study staff the benefit of valuable advice from committee members.

The report of the study has been approved by the Pennsylvania Library Association and by the Governor's Commission on Public Library Development, headed by Mr. Albert M. Greenfield, Philadelphia financier.

PLAN FOR DEVELOPMENT

A plan for statewide library development has been drawn from the general survey.

It recommends basic minimum standards of library service which are not being met at present by a great number of libraries. These standards deal with: matters of accessibility; the number and quality of library staff; minimum resources of books and materials; minimum service and the number of hours libraries are open each week; and minimum financial support which will assure service which meets present-day needs in Pennsylvania.

There are many recommendations in the report. Essentially, they call for a coordinated library system to provide a service which is useful to every person and every phase of activity in the State.

Cost of this service, compared with total governmental expenditures, is relatively small. The total is \$24 million annually—slightly over 1 percent of public expenditures in Pennsylvania.

At present about \$9 million is being spent in Pennsylvania for public library service. The State contributes about 1 percent. It is proposed that the State carry slightly more than 25 percent of total expenditures for library service.

The per capita public library expenditure in Pennsylvania now is 83 cents—among the lowest spent by any State in the Union. The report recommends that this be raised to about \$2. This figure is well below the \$2.60 to \$3.41 per capita recommended in the national standards of the American Library Association. Yet even at this lower cost Pennsylvania can have a good minimum level of service because there are a number of built-in economies in the proposed plan.

PROPOSED ORGANIZATION OF LIBRARY SERVICE

Major recommendations contained in the report are these:

Establishment of 27 district systems providing complete library service and their coordination by the State Library.

Maintenance of three distinct levels of library service:

(1) Local service to be provided by the 367 public libraries now in existence;

(2) Stronger specialized services would be provided through the 27 district library centers;

(3) Special resource service would be given through four very large libraries in strategic locations.

Formation of libraries would be encouraged in unserved areas by the State Library, its staff, and other local and district libraries.

The plan attempts to build upon strength now available. Only minimum reorganization of the present structure of libraries in Pennsylvania is involved.

Each library would maintain its own independence and identity. However, there would be close cooperation between local libraries in combination with a

district center to form 27 true systems. The State Library would serve as the coordinating agency for the statewide plan.

Major advantages of the plan are these:

Local day-to-day service would be available to every resident of the State within 15 to 20 minutes of his home.

A library with broad subject content and professional staff would be within a hour's distance of each resident.

A research library would be located within 1 day's round trip of every resident, allowing some time to consult materials.

The most important element in the proposed plan is the designation of 27 district library centers which would open their doors to everyone within their range free of charge. In all but five areas, these units would be built upon existing public libraries which are conveniently located within an hour of all people in their districts.

In five districts college libraries are proposed for district library centers. These are areas in which they are the only agencies of sufficient strength to assume responsibility for central library service. In these areas, the extension function would be directly administered by the State Library.

It is proposed that State aid be given the district centers for extending their service areas. Each district library would be required to maintain an extension service to help local libraries to attain minimum standards.

Coordinating local libraries into a cooperative system, it would extend loan of materials, special reference and professional service to all the libraries in the system in addition to deposits of books. Each system would be encouraged to develop joint selection of books and to experiment with centralized processing of materials.

Supporting these 27 units would be four regional resource centers: the Philadelphia Free Library; the State Library; the Pennsylvania State University Library, and the Carnegie Library of Pittsburgh.

The facilities of these four major centers would be always available to district libraries for specialized material and professional aid. The State Library would coordinate the 27 districts and four resource centers into a statewide system.

PROPOSED FINANCING OF LIBRARIES

A combination of increased local and State support of libraries would be used to finance the \$24 million needed for the program.

It is proposed that an expanded program of State financial assistance be adopted. Such funds would be used for four related purposes:

To aid libraries in communities which make a reasonable local effort to maintain service.

To aid especially those districts which have the least capacity to help themselves.

To aid libraries selected as district centers.

To aid four major research libraries which stand as specialized collections in regions.

To receive State aid, each level of library service—local, district, and regional—would be required to meet these basic conditions:

- (1) A minimum local financial effort;
- (2) Achievement of standards outlined for each service level;
- (3) Cooperation within library systems.

STATE SHARE OF LOCAL SERVICE

To qualify for State aid under the proposed plan each local library is obligated to meet a minimum share of its own support. This local effort would be equal to $\frac{1}{2}$ mill on market value or \$2 per capita, whichever is lower.

The term market value applies to taxable real property in the library's service area. Information on market value in individual districts is supplied each year by the State tax equalization board.

Libraries may secure such information through consultation with the board of school directors, the county school office, or school administrators in their own service area. When asking for figures on market value, State tax equalization board figures should be specified.

The sum of money required for local effort may be derived from any source or combination of sources. It may be secured through public funds (tax levies or appropriations from municipalities or school districts) or through private

endowments, gifts, etc. As a general rule, however, the only reliable source of income is tax revenue.

If the library's total income equal the $\frac{1}{2}$ -mill level it is entitled to \$0.25 per capita for the population of its service area. This would eventually require \$2,758,000 in State aid.

STATE EQUALIZATION AID

When the minimum local share of library support produces less than \$1.25 per capita, it is proposed that additional funds be provided by the State.

This additional equalization aid would be the difference between the amount actually produced by the $\frac{1}{2}$ -mill rate and \$1.25 per capita up to a maximum of \$.025 per capita. This feature of the library plan would cost a little over \$700,000 per year at 1957 valuation and population levels.

While this is only a fraction of the total to be spent for libraries, it would have a highly desirable strategic effect. It would apply in precisely those places which would lag most if they were not given special assistance.

Since it is the goal of the plan to provide better and more efficient service for all areas of the State, this section of the program offers every community a financial foundation for an indispensable local library as a vital force in the public interest.

STATE SHARE OF CENTRAL SERVICE

The 27 central libraries designated in the plan would serve their entire district. Because of this each would receive additional State aid.

This would amount to \$0.25 per capita for the people served in the extended district outside the immediate service area of the library. Again, certain conditions would have to be met.

These conditions pertain to standards rather than fund raising. Each district center would raise no more money than that needed to qualify it for local service aid.

However, each center would be required to meet minimum standards for district libraries. It would open its doors to all residents in the district for circulation and reference service and assume the extension function for the district.

This portion of the program provides the focal point for distribution of services and materials between the State or regional centers and the local community. It would require \$1,760,000 per year in State aid.

STATE SHARE OF REGIONAL SERVICE

The proposed plan calls for four regional resource centers. They are already established in strategic geographical locations across the State.

Like the district centers, they would be called upon to open service to people from far beyond their normal boundaries. For this State-level service they should receive additional State aid.

The proposed amount is \$100,000 annually for each of the libraries. This amount should be reviewed after 5 years to be sure that it pays a considerable part of the extra costs imposed on these resource centers.

THE 5-YEAR LEEWAY PERIOD

There would be a 5-year leeway period for compliance with the conditions of local financial support and meeting of standards required for local and central libraries.

The specific proposal is that full State aid be made available if the locality comes up to one-half of the fair share of local financial support, a sum equal to one-fourth mill on market value, or \$1 per capita, whichever is lower.

The library would have 5 years in which to bring its local effort up to one-half mill on market value. If it had not achieved this level in the 5-year period, it would no longer be eligible for State aid.

This leeway period is designed to make a definite improvement in library service immediately and to provide an incentive to localities to assume their fair share of library support.

It is recommended that each agency applying for State aid submit to the State library a plan for the use of these funds so that State money would be used wisely and effectively for definite improvement of service.

Approximateley \$5,700,000 in State aid would be needed each year to carry this program. In addition it is proposed that the State provide a \$1 million

matching fund to aid communities in construction of library buildings and in making necessary capital improvements.

PROMOTION AND DEMONSTRATION OF LIBRARY SERVICES

The survey report asks that \$300,000 be appropriated to the State library during each of the first 5 years of the program. It would be used for promotion and demonstration of library service.

Such stimulation where library service is now completely lacking or sub-standard could take a number of forms. It might be bookmobile service to an area which had none before.

It could be used to provide a professional children's librarian in a district. In cases where a library has concentrated its service on children, a demonstration of information and reference service for adults in the county library system would stimulate interest and increase use of the library.

Such demonstrations would be financed, staffed, and materials would be supplied by the State library for a limited period to show aspects of modern library service.

There are several ways in which a community without service may establish its own library facilities and still qualify in the total program.

It may take steps to have a county library established, with service to the locality as part of the county program.

It may contract for service with the district library center or with another existing library of some strength in its own area.

It may start a local library and affiliate with either a county library or a district library center.

Any community organizing a new library would have the assistance and the advice of the extension librarian at its district library center and also the services of the State library extension division.

PENNSYLVANIA STATE LIBRARY

In regard to the State library, the survey makes the following recommendations:

That the present law regarding the functions of the State library be clarified and strengthened so that this agency may assume its role as coordinator and administrator of the statewide plan envisioned.

That the administrative position of the library within the department of public instruction be strengthened or an alternative placement for it in State government be found.

That the budget for the State library be almost doubled so that it can carry out its necessary functions in a statewide library program.

That it move rapidly toward meeting standards as one of the four regional resource centers called for in the plan. This would involve building up its book collection significantly, hiring specialists in those subject areas for which it takes responsibility, and generally increasing its staff and services.

That it expand its services to Pennsylvania libraries, administer demonstration programs for developing library service in areas where it is weakest and establish a continuous program of study of library problems in the State.

PERSONNEL

Without qualified personnel who are devoted to the high standards of their profession no program such as this can be successful. Once the proposed plan begins to have its desired effect in stimulating greater interest in the library and broader use of its services, more trained personnel will be needed.

It is recommended that every effort be made to assist in the education and training of qualified personnel to fill these additional library positions called for by the plan. There should also be a program aimed at raising the level of training of present personnel.

There are several ways in which this may be accomplished. The survey makes these proposals:

1. That the State give financial assistance to at least three graduate library schools in Pennsylvania.

2. That the State make scholarship funds available to encourage and enable more students to enter the library field.

3. That undergraduate colleges provide introductory courses in librarianship to recruit personnel to the field.

4. That inservice training programs be made available and that the State library participate in their development for the education of librarians on the job.

It also seems obvious that some action is needed in the establishment of professional standards. Therefore, the survey recommends that State certification of librarians be established by law providing for three levels of personnel: library assistants, provisional librarians, and professional librarians.

There is great need for a program which would aid local library trustees in their search for better understanding of library needs and in their desire to implement improved systems within their own communities.

Library trustees occupy an important and powerful position in relation to the proposed program. Many of these men and women feel a need for broader education in the new methods of library service. They want, also, to be able to use their own talents and abilities more forcefully.

At present they have the potential to act in public good in all communities, but in some they are ineffective.

It is the purpose of the proposed State library plan to coordinate all library functions within the Commonwealth so that they may serve the greatest number of persons in the most efficient manner.

This goal can be accomplished best and most economically through a program which will include all the major recommendations contained in this summary and the full report of the library survey.

CONCLUSION

We have heard much during recent months of the need for renewed interest and greater support for education. Informed and enlightened public support is indispensable to a constantly improving education system.

Certainly no other single element works more conclusively toward broadening and strengthening the mind outside the school than does the public library. In no other community agency is the course of human aspiration and understanding more firmly conceived.

During recent years in Pennsylvania there has been a tendency toward sloughing off the importance of the library within the community. With public support lagging, library physical plants have deteriorated along with their supplies and resource material.

As a Commonwealth we are spending \$750 million each year to educate Pennsylvania children. This sum helps to pave the way for better citizenship, for a greater cultural background, and a general elevation of the public welfare.

Yet we have done little or nothing to insure this education we have given our children against the dryrot of stagnation and disuse. The fact is that education is never a completed action of the human mind.

To be genuinely educated, the mind must be constantly invigorated both by new ideas and by a restatement of those which are timeless. After high school and college, Pennsylvania has neglected to preserve its greatest instrument for the encouragement of learning—the library.

There is no greater investment in the search for knowledge than the public library which is well equipped and staffed by qualified personnel. There is no better insurance that the money we have spent to educate our children has been wisely used.

The Pennsylvania library survey demonstrates dramatically that there is a need for greater public support of library facilities. This support must come from all levels of government and from the hundreds of enlightened, civic-minded community organizations for whom the constant improvement of human life is the central goal.

(Further information on the Pennsylvania library survey may be secured from Ralph Blasingame, State librarian, box 608, Harrisburg.)

JOINT STATEMENT OF SENATORS HUMPHREY AND MCCARTHY

Senator HILL. Senators Humphrey and McCarthy have requested that their joint statement requesting appropriation of the full amount of the authorization, \$7,500,000, for library services be enacted. Their statement will appear in the record at this point.

(The statement referred to follows:)

STATEMENT OF SENATOR HUBERT H. HUMPHREY AND SENATOR EUGENE MCCARTHY
IN SUPPORT OF FULL APPROPRIATION FOR LIBRARY SERVICES PROGRAM

Mr. Chairman, one of the important programs administered under the U.S. Office of Education is that of providing grants to States for library services. This program was authorized by the Library Services Act of June 19, 1956, which earmarked an annual appropriation of \$7,500,000 for these services. So far the full allocation has never been appropriated, but we sincerely hope that it will be appropriated for fiscal 1960.

The Bureau of the Budget has recommended an appropriation of \$5,150,000 for fiscal 1960. This recommendation is predicated on the assumption that the \$850,000 which has not yet been distributed to the States from the current appropriation would be added to make the 1960 appropriation \$6 million or equivalent to the 1959 appropriation.

Minnesota has qualified for and used its full allocation of library service funds each year. Since the remaining \$850,000 is for States which have not used their full allocations through fiscal 1960, Minnesota and other States which have already used their full allocation are faced with a cutback in their programs. In the case of our State, funds would be cut back close to the 1958 appropriation. We cannot afford such a program cutback with the wide response to the program evidenced in Minnesota.

The Minnesota library service program has been quite effective, Mr. Chairman, and it is gaining momentum. We are especially proud of the establishment of our first regional libraries with the combined State-Federal aid funds provided by LSA and State matching funds.

However, the needs of the program are still demanding. This means that more money is needed. Therefore, Mr. Chairman, we urge the committee to appropriate for fiscal 1960 the full \$7,500,000 for library services.

Because we are proud of the accomplishments in library services in Minnesota, and because we feel the members of this committee should be aware of these accomplishments, we are attaching a progress report prepared by the library division of the Minnesota Department of Education.

LIBRARY PROGRESS IN MINNESOTA UNDER THE LIBRARY SERVICES ACT

Prepared by Library Division, Minnesota Department of Education

Minnesota has qualified for, and used, its full allocation each year under the 3 years (through fiscal 1959) of the Library Services Act. The Federal funds were as follows: 1957, \$40,000; 1958, \$117,448; 1959, \$135,750. In 1958 and 1959 the Minnesota program under LSA has had State aid funds to match the Federal funds. Minnesota has more than matched the Federal funds.

As a result of the expenditure of this money, the following accomplishments have been made possible:

1. Strengthening the services of the library division of the State department of education, which administers the program. Specifically:

The purchase and operation of two exhibit-demonstration bookmobiles.

The addition of a field adviser (professional), a bookmobile driver, and more clerical help.

The rapid growth in the quantity and quality of books available for its direct rural services and service to small public libraries.

The preparation of a wide variety of explanatory materials about the rural library development program.

Allowance for the additional travel involved in work with the local libraries, library boards, and citizen groups in the rural areas of the State.

2. Establishing and developing new and improved rural library service in the State through grants-in-aid:

New establishments:

Anoka County Library: Furnishes service to the 20,000 people in the county (1950 census, now estimated as double this) who previously had only the city libraries in Columbia Heights and Anoka to serve them. Has nearly 14,000 books (all newly purchased), operates a bookmobile and three local-service libraries (Spring Lake Park, Coon Rapids, and Circle

Pines) and provides films. Though brand new, the use is running at a rate which will total over 100,000 circulation this year, and it is still growing rapidly.

Dakota-Scott Regional Library (serving Dakota and Scott Counties): Newly established region, just started to serve two counties with over 50,000 rural people. Will have two bookmobiles, and operate several local small libraries. Just developing.

East Central Library (serving Isanti, Mille Lacs, and Pine Counties): Regional library now being established. Only Isanti County had library service on countywide basis before new development. Board appointed and now making plans to create service for around 45,000 rural people.

Development guests: Previously established county libraries which prepared plans and qualified for small grants in 1958 were—

Blue Earth County, for bookmobile, two branches, additional nonfiction books, and the bookmobile operating expenses.

Clay County Library, for science and other nonfiction books, two branches, establishment of audiovisual services.

Kandiychi-Willmar Public Library, for merging formerly separate libraries, additional nonfiction books, audiovisual service, three new branches.

Koochiching County Library, for adult nonfiction books, some equipment.

Martin County Library, for books and audiovisual materials and services, and equipment.

Nobles County Library, for books, two improved branches (raised from stations) part of cost of bookmobile.

Stearns County Library, for adult books and establishment of three branches.

Waseca County Library, for bookmobile, books, and audiovisual service.

In all grant areas, local boards are in charge, and must have a professional librarian as administrator. Local support must be provided, either (1) not less than provided in 1956; (2) more if service established with grant required added funds to continue support; or (3) not less than 1 mill on the assessed valuation which ever is largest sum. All areas must be prepared to support the continuation of the service after it is established with the help of aid funds.

Current activities toward new developments:

Both Polk and Marshall Counties have acted to establish library service on a countywide basis, and the attempt is being made to induce them to join together in a regional library. At this time, they have been unable to find mutually satisfactory terms under which they can join. Some kind of new development in the area is certain, but it is still uncertain as to what it will be.

Other counties with citizen groups now working actively toward participation in the library development program are: Becker, Meeker, Benton, and Sherburne. Preliminary, but as yet unorganized, interest is manifest in 10 other counties in various parts of the State.

PAYMENTS TO SCHOOL DISTRICTS
APPROPRIATION ESTIMATE

“For payments to local educational agencies for the maintenance and operation of schools as authorized by the Act of September 30, 1950, as amended (20 U.S.C., ch. 13), **[\$130,000,000]** *\$142,300,000: Provided, That this appropriation shall also be available for carrying out the provisions of section 6 of such Act.*”

Amounts available for obligation

	1959 appro- priation	1960 budget estimate	1960 House allowance
Actual appropriation.....	\$130,000,000	\$142,300,000	\$163,957,000
Supplemental appropriation.....	20,000,000		
Total available for obligation.....	150,000,000	142,300,000	163,957,000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Payments to local educational agencies.....	-----	\$142, 500, 000	-----	\$134, 200, 000	-----	\$155, 857, 000
2. Payments to other Federal agencies.....	4	7, 500, 000	4	8, 190, 000	4	8, 100, 000
Total obligations.....	4	150, 000, 000	4	142, 300, 000	4	163, 957, 000

Obligations by objects

Object classification	1959 estimate	1960 estimate	House allow- ance
SUMMARY OF PERSONAL SERVICES			
Total number of permanent positions.....	4	4	4
Full-time equivalent of all other positions.....	1	1	1
Average number of all employees.....	4	4	4
01 Personal services.....	\$25, 372	\$25, 585	\$25, 585
02 Travel.....	56	56	56
03 Transportation of things.....	600	600	600
04 Communication services.....	50	50	50
05 Rents and utility services.....	150	150	150
07 Other contractual services.....	19, 017	18, 896	18, 896
08 Supplies and materials.....	3, 255	3, 255	3, 255
09 Equipment.....	200	200	200
11 Grants, subsidies, and contributions.....	149, 953, 249	142, 253, 150	163, 910, 150
15 Taxes and assessments.....	459	466	466
Total.....	150, 002, 408	142, 302, 408	163, 959, 408
Deduct charges for quarters and subsistence.....	2, 408	2, 408	2, 408
Total obligations.....	150, 000, 000	142, 300, 000	163, 957, 000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	4	\$130, 000, 000
1959 supplemental appropriation.....	-----	20, 000, 000
Total appropriation.....	4	150, 000, 000
1960 appropriation request.....	4	142, 300, 000
Net change requested.....	-----	-7, 700, 000

Decreases for program items: For assistance to States in the maintenance and operation of schools:		
1960 budget estimate.....	-----	-\$7, 700, 000
1960 House allowance.....	-----	+13, 957, 000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$21,657,000 for payments to school districts. As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee, the following statement is submitted in explanation of how this increase, if enacted, would be applied.

At the time the budget was prepared for 1960, the estimate for payments to school districts of \$142,300,000 was consistent with the action of the Congress in 1959, when an amount of \$130 million was appropriated which would have provided payments to school districts of 85 percent of full entitlements. Subsequently, an additional amount of \$20 million for this purpose is pending in the

Second Supplemental Appropriation Act for 1959, which will provide for payment of full entitlements in 1959.

A legislative proposal is in process of development which will propose certain restrictions on eligibility, which, if enacted, would substantially reduce the requirements to pay full entitlements in 1960.

The House allowance for this activity in fiscal year 1960 of \$163,957,000 would provide for payments to school districts of full entitlements under existing legislation, as has now been provided for the fiscal year 1959.

As stated by the Secretary when he appeared before the committee, such an increase would further contribute to inflation and weakening of the national economy. It is recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

Summary of Public Law 874 estimated entitlements, by State, fiscal years 1959 and 1960 estimates

State or Territory	1959, includes supplemental	1960 budget estimate	1960 House allowance
Total.....	\$150,000,000	\$142,300,000	\$163,957,000
Alabama.....	3,647,268	3,514,848	4,081,812
Alaska.....	4,694,763	4,421,404	5,134,832
Arizona.....	3,047,794	2,870,768	3,333,838
Arkansas.....	982,816	925,731	1,075,056
California.....	24,002,821	22,306,306	25,907,200
Colorado.....	4,534,701	4,271,331	4,960,295
Connecticut.....	1,315,050	1,237,806	1,438,471
Delaware.....	184,446	174,204	202,304
Florida.....	4,132,805	3,891,574	4,519,586
Georgia.....	4,715,609	4,441,335	5,158,182
Idaho.....	1,053,171	991,799	1,152,014
Illinois.....	2,621,711	2,468,591	2,866,672
Indiana.....	680,112	642,490	746,130
Iowa.....	394,202	371,205	431,199
Kansas.....	3,893,527	3,667,150	4,258,945
Kentucky.....	1,115,116	1,050,347	1,219,773
Louisiana.....	976,446	919,625	1,068,198
Maine.....	1,139,433	1,073,251	1,246,372
Maryland.....	5,384,583	5,071,530	5,889,612
Massachusetts.....	3,762,959	3,544,394	4,116,123
Michigan.....	794,565	747,744	868,591
Minnesota.....	401,097	377,700	438,741
Mississippi.....	1,170,495	1,102,251	1,280,350
Missouri.....	1,765,253	1,598,310	1,856,291
Montana.....	1,201,842	1,132,036	1,314,639
Nebraska.....	1,276,441	1,442,311	1,674,964
Nevada.....	892,101	840,285	975,828
New Hampshire.....	706,831	665,506	772,623
New Jersey.....	2,254,687	2,123,350	2,465,858
New Mexico.....	3,709,620	3,494,153	4,057,778
New York.....	3,263,833	3,073,788	3,569,606
North Carolina.....	1,673,554	1,576,549	1,830,622
North Dakota.....	271,087	243,577	283,403
Ohio.....	3,559,672	3,352,714	3,893,757
Oklahoma.....	5,401,512	5,086,612	5,908,458
Oregon.....	745,719	702,505	815,707
Pennsylvania.....	1,808,368	1,703,332	1,978,089
Rhode Island.....	1,371,485	1,291,825	1,500,203
South Carolina.....	2,461,414	2,317,585	2,692,424
South Dakota.....	1,404,576	1,369,053	1,589,889
Tennessee.....	1,650,716	1,554,837	1,805,640
Texas.....	9,804,864	9,233,521	10,723,982
Utah.....	1,390,004	1,309,010	1,520,460
Vermont.....	61,916	58,600	67,728
Virginia.....	9,467,946	8,915,728	10,355,444
Washington.....	7,153,857	6,733,336	7,825,265
West Virginia.....	131,090	123,477	143,394
Wisconsin.....	547,915	516,091	599,339
Wyoming.....	431,565	406,121	471,631
Guam.....	507,309	477,843	554,922
Hawaii.....	2,885,792	2,719,033	3,156,194
Virgin Islands.....	53,541	50,528	58,566
Federal agencies.....	7,500,000	8,100,000	8,100,000

PREPARED STATEMENT

Dr. DERTHICK. Mr. Chairman, the next item has to do with payments to school districts in federally affected areas under Public Law 874.

(The statement referred to follows:)

STATEMENT OF COMMISSIONER OF EDUCATION ON PAYMENTS TO SCHOOL DISTRICTS,
OFFICE OF EDUCATION

The program of Federal financial assistance for the operation of schools in federally affected areas was extended by the 85th Congress through fiscal year 1961, with certain amendments. The Congress appropriated \$130 million in the first Supplemental Appropriation Act for fiscal year 1959, and subsequent to our hearings before the House Appropriations Committee an additional \$20 million is pending in the second Supplemental Appropriation Act, making a total of \$150 million for the current year. The total funds now authorized for the fiscal year 1959 will provide for payments of full entitlements.

The appropriation requested for 1960 amounts to \$142,300,000 and was based on congressional action in providing an original appropriation for 1959 which would provide payments to school districts of 85 percent of full entitlements.

The main factors causing the increase in requirements for 1960 are the continuing increase in cost of education and the liberalizing amendments made by Public Law 85-620. These amendments resulted in an increase in the number of applications and the number of federally connected children counted for entitlement during fiscal year 1959. In fiscal year 1960 it is estimated that the attendance of federally connected children will increase over fiscal year 1959 by 6 percent—from 1,360,000 in 1959 to 1,440,000 in 1960.

It is estimated that some 4,000 school districts will apply for assistance in fiscal year 1960, an increase of 5.5 percent in the number of applications.

The payments provided under this legislation will be used by school districts to maintain standards of education in federally affected districts which are generally comparable to educational programs provided in other school districts within the State.

BUDGET PROVISION

Dr. DERTHICK. The President's budget calls for an amount of money that would pay 85 percent of the entitlement.

Senator HILL. Eighty-five percent of the Federal entitlement?

Dr. DERTHICK. That is right.

HOUSE ACTION

Senator HILL. The House increased it to 100 percent?

Dr. DERTHICK. One hundred percent, that is right.

Senator HILL. How can you justify paying 85 percent, Doctor?

Dr. DERTHICK. There is a legislative proposal coming through, calling for certain amendments to this act.

Senator HILL. I am glad you used that word "coming." It would have to go through both committees, the committees of the House and Senate, and then have to pass both bodies, would it not?

Dr. DERTHICK. I understand the House Appropriations Committee has given some encouragement to the idea.

Senator MONRONEY. Would this not mean that if only 85 percent of the entitlement is voted, these federally impacted areas then would have a diminishment of 15 percent for a year in which they have already made plans and the enrollments are there and the job is there to be done?

Dr. DERTHICK. Except that the Congress has provided for a supplemental to pay 100 percent on the current year 1959.

Senator MONRONEY. However, then the fiscal year starts in July 1?
Mr. KELLY. I might clarify that.

EFFECT OF FUNDS IN 1959 SUPPLEMENTAL ACT

At the time the President's budget was put together and requested 85 percent of the entitlement, it was following an action which the Congress had taken in the closing days of the last session of Congress, which action has now been changed. That is in connection with the supplemental which just recently passed the House, funds were provided to bring entitlements up to 100 percent, therefore the premise on which the President's budget was based has been changed. As the Secretary pointed out when he testified, if the funds were kept at this 85 percent level, they would not in his judgment provide the total amount required if the Congress were to enact the more restrictive legislation on eligibility, which is now being developed for submission to the Congress.

Senator MONRONEY. I still want to make it clear that these impacted areas will have under the budget 15 percent less in Federal funds for the school year that will begin in September.

Mr. KELLY. Than the law authorized.

Senator MONRONEY. That is right.

Therefore, they must face an adjustment of either more pupils per teacher or somehow, somehow, try to fund that loss of Federal revenue which they are now receiving.

Mr. HUGHES. The school districts, however, sir, were of course put on notice last December that the current year's funds for fiscal 1959 at that time would pay only 85 percent, and likewise the President's budget, which was released in January, put them on notice that only 85 percent of the funds were being requested for fiscal 1960, so they had notice in advance of the request so that they could make plans.

Subsequent to that time, of course, the Congress has made appropriations to pay 100 percent in 1959.

PRESENT STATUS OF FUNDS

Senator HILL. However, in the supplemental bill, we brought them back to the 100 percent.

Mr. HUGHES. That is right, sir.

Senator HILL. That is the most recent action, because that bill is now in conference, but that figure is in. There is no disagreement on that?

Mr. HUGHES. No, sir.

EFFECT ON IMPACTED AREA

Senator MONRONEY. How do you think these thousands of impacted areas are going to make it up?

Will they have 1 month less school, or what?

Mr. GRIGSBY. It depends on the degree of impact. In some school districts where the degree of Federal impact is very heavy, so that the Federal payment constitutes a very substantial part of the local school budget, they would have great difficulty in making it up. They would have to increase tax rates, or they would have to shorten the

school year, as you suggest, or they would have to increase sizes of classes and to bring the pupil-teacher ratio down in order to save money.

Senator MONRONEY. Is there any plan to provide for the worst cases? Where the Federal impact bears a very small relationship to the total enrollment, they might pick up this cut, whereas those areas where you have a larger number of students who are there because of the Federal impact would not be able to continue.

I am familiar with cases where large population areas with very little impact are getting this money and yet I know of other areas where, without this money, the school system would really fold up: You would have no schools.

Mr. GRIGSBY. There is no present provision in the law to make any difference between those two types of districts you mention.

When the funds are not sufficient to pay entitlements in full, you take out first the money necessary to fund the on-base schools, which are federally supported in their entirety, and the remainder is to be prorated among all eligible applicants.

Senator HILL. All right, Doctor.

Dr. DERTHICK. Similar situations exist, Mr. Chairman, with regard to school construction under Public Law 815.

ASSISTANCE FOR SCHOOL CONSTRUCTION

APPROPRIATION ESTIMATE

"For an additional amount for providing school facilities and for grants to local educational agencies in federally affected areas, as authorized by the Act of September 23, 1950, as amended (20 U.S.C., ch. 14), including not to exceed **[\$200,000]** \$900,000 for necessary expenses during the current fiscal year of technical services rendered by other agencies, **[\$50,000,000]** \$38,500,000, to remain available until expended: *Provided*, That no part of this appropriation shall be available for salaries or other direct expenses of the Department of Health, Education, and Welfare.

"[For an additional amount for necessary expenses of technical services rendered by other agencies in connection with title III and IV of the Act of September 23, 1950, as amended (20 U.S.C., ch. 14), \$800,000, to remain available only until June 30, 1959: *Provided*, That no part of this appropriation shall be available for salaries or other direct expenses of the Department of Health, Education, and Welfare.]"

Amounts available for obligation

	1959 appro- priation	1960 budget to Congress	1960 House allowance
Actual appropriation.....	\$50,800,000	\$38,500,000	\$61,135,000
Supplemental appropriation.....	24,600,000		
Prior year balance available.....	46,698,045	11,000,000	11,000,000
Unobligated balance carried forward.....	-11,000,000		
Total available for obligation (total obligations).....	111,098,045	49,500,000	72,135,000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Assistance to local educational agencies.....	-----	\$81,027,687	-----	\$41,600,000	-----	\$63,135,000
2. Assistance for school construction on Federal properties:						
(a) Under title II, Public Law 815.....	-----	36,214	-----		-----	
(b) Under title III, Public Law 815.....	-----	29,034,144	-----	7,000,000	-----	8,000,000
3. Payments for technical services.....	-----	1,000,000	-----	900,000	-----	1,000,000
Total obligations.....	-----	111,098,045	-----	49,500,000	-----	72,135,000

Obligations by objects

Object classification	1959 estimate	1960 estimate	1960 House allowance
SUMMARY OF PERSONAL SERVICES			
Average number of all employees.....	1 11	1 13	1 13
01 Personal services.....	\$86,800	\$109,500	\$109,500
02 Travel.....	20,400	25,700	25,700
03 Transportation of things.....			
04 Communication services.....	2,800	3,500	3,500
07 Other contractual services.....	1,000,700	900,900	1,000,900
08 Supplies and materials.....	100	100	100
10 Lands and structures.....	28,955,358	6,855,000	7,855,000
11 Grants, subsidies and contributions.....	81,027,687	41,600,000	63,135,000
Contribution to retirement fund.....	4,100	5,200	5,200
15 Taxes and assessments.....	100	100	100
Total obligations.....	111,098,045	49,500,000	72,135,000

¹ Includes administrative and nonadministrative.

Summary of changes

1959 actual appropriation.....	\$50,800,000
1959 supplemental appropriation.....	24,600,000
Total appropriation.....	75,400,000
1960 appropriation request.....	38,500,000
Net change requested.....	—36,900,000

	1960 budget estimate	1960 House allowance
Decreases: For program items:		
Grants for school construction.....	—\$36,800,000	—\$14,265,000
Technical services rendered by other agencies.....	—100,000	
Total change requested.....	—36,900,000	—14,265,000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$22,635,000 for assistance for school construction. As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee, the following statement is submitted in explanation of how this increase, if enacted, would be applied.

At the time the budget was prepared for 1960, the estimate for assistance for school construction of \$38,500,000 was consistent with the action of the Congress

in 1959, when an amount of \$50,800,000 was appropriated which would have provided only for projects of the highest priority. Subsequently, an additional amount of \$24,600,000 for this purpose is pending in the Second Supplemental Appropriation Act for 1959, which will provide for all school construction projects to be received in 1959.

A legislative proposal is in process of development which will propose certain restrictions on eligibility, which, if enacted, would substantially reduce the requirements to pay full authorizations in 1960.

The House allowance of \$61,135,000 for this activity in fiscal year 1960 would provide for full authorizations for school construction projects under present legislation, as has now been provided for the fiscal year 1959. This allowance includes \$1 million for technical services to be rendered by the Housing and Home Finance Agency. Mr. Seward is present to present his comments.

As stated by the Secretary when he appeared before the committee, such an increase would further contribute to inflation and weakening of the national economy. It is recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

Summary of construction aid, Public Law 815, by State, fiscal years 1959 and 1960 estimates

State or Territory	1959, includes supplemental	1960 budget estimate	1960 House allowance
Total.....	\$75,400,000	\$38,500,000	\$61,135,000
Alabama.....	1,257,655	638,232	1,020,747
Alaska.....	1,522,115	662,979	1,060,325
Arizona.....	566,735	997,196	1,594,850
Arkansas.....	968,225	833,002	1,332,250
California.....	25,557,625	9,322,383	14,909,615
Colorado.....	1,077,550	439,495	702,900
Connecticut.....	616,628	211,644	338,490
Delaware.....			
Florida.....	1,774,974	916,900	1,466,430
Georgia.....	1,852,256	1,044,456	1,670,435
Idaho.....	632,079	458,691	733,600
Illinois.....	114,980	55,336	38,500
Indiana.....	1,404,103	660,349	1,056,120
Iowa.....	280,226	162,985	260,668
Kansas.....	1,611,530	891,926	1,426,488
Kentucky.....	191,634	82,722	132,300
Louisiana.....			
Maine.....	109,954	68,529	109,600
Maryland.....	2,056,455	677,406	1,083,400
Massachusetts.....	25,132		
Michigan.....	7,104,918	2,223,536	3,556,179
Minnesota.....			
Mississippi.....	503,532	360,963	577,300
Missouri.....	1,208,739	1,071,664	1,713,950
Montana.....	779,103	328,386	525,200
Nebraska.....	698,600	405,352	648,294
Nevada.....	491,966	219,029	350,300
New Hampshire.....		376,563	602,250
New Jersey.....	1,113,992	418,674	669,600
New Mexico.....	3,111,277	2,343,089	3,747,384
New York.....	980,162	495,018	791,700
North Carolina.....	403,631	936,576	1,497,900
North Dakota.....	294,049	174,823	279,600
Ohio.....	1,063,099	330,325	528,300
Oklahoma.....	1,559,548	1,237,471	1,979,131
Oregon.....			
Pennsylvania.....			
Rhode Island.....	62,830	29,700	47,500
South Carolina.....	189,749	80,971	129,500
South Dakota.....	1,110,304	753,806	1,205,589
Tennessee.....	82,937	13,130	21,000
Texas.....	2,677,809	1,386,832	2,213,010
Utah.....	486,275	260,014	415,850
Vermont.....			
Virginia.....	3,441,561	1,465,984	2,344,600
Washington.....	874,606	1,266,383	2,025,370
West Virginia.....	8,168	6,878	11,000
Wisconsin.....			
Wyoming.....	84,822	48,458	77,500
Guam.....	720,927	581,554	930,100
Hawaii.....	1,800,105	1,469,861	2,350,800
Puerto Rico.....	1,927,435	1,190,729	1,904,375
Technical assistance.....	1,000,000	900,000	1,000,000

PREPARED STATEMENT

(The statement referred to follows:)

STATEMENT OF COMMISSIONER OF EDUCATION ON ASSISTANCE FOR SCHOOL
CONSTRUCTION

The 85th Congress, by Public Law 85-620, amended and extended Public Law 815, which authorizes Federal financial assistance to school districts for school construction required because of increased numbers of children residing on Federal property or residing with a parent employed thereon, or whose parents have moved into a school district for employment in plants having Federal contracts.

The authorization contained in the legislation requires the establishment of cutoff dates for receipt of applications and the establishment of priorities based on urgency of need in approval of construction projects when funds available are not sufficient to cover all approvable projects.

The Office expects to receive some 300 project applications by the cutoff date to be established in the fall of 1959. These applications will cover the 2-year period June 1959 to June 1961. In addition, certain low-priority applications which were filed in the fiscal year 1959, but for which funds were not available in the original appropriation, would have been carried forward as a claim against fiscal year 1960 appropriations. Subsequent to our hearings before the House Committee on Appropriations, a supplemental appropriation of \$24,600,000 is pending in the Second Supplemental Appropriation Act, which will provide a total of \$75,400,000 for the current fiscal year. Of this total sum, \$1 million is assigned for the technical services rendered by the Housing and Home Finance Agency. The total funds authorized for the fiscal year 1959 will provide for all project applications for school construction which we anticipate.

The budget request of \$38,500,000 will permit the approval in fiscal year 1960 of those projects which have the highest priority in terms of the relative urgency of need for additional school facilities.

SITUATION AT TIME OF BUDGET PREPARATION

Dr. DERTHICK. At the time that the President's budget was prepared for 1960 the appropriation requested of \$38.5 million was consistent with the action of Congress in 1958 when the amount of \$50 million was appropriated, which would have provided only for projects of the highest priority. Subsequently an additional amount of \$24.6 million for this purpose is pending in the second supplemental appropriation for all projects to be received in 1959. Of course, the President's request would not pay all that.

Senator HILL. That would be 65 percent, too, would it?

PRIORITY BASE

Dr. DERTHICK. No; it is on a different basis. It is a priority basis, so you drop those in the lower priority category, and your committee has been advised by the Secretary of our position on that.

Senator HILL. Yes, that is right. He has made that very clear. What about your technical activities?

Dr. DERTHICK. Would you like to hear from Mr. Seward on the amount of technical services in these programs?

Senator HILL. Yes.

ASSISTANCE FOR SCHOOL CONSTRUCTION, TECHNICAL SERVICES

STATEMENT OF PERE SEWARD, DEPUTY COMMISSIONER,
COMMUNITY FACILITIES ADMINISTRATION

PREPARED STATEMENT

Mr. SEWARD. Mr. Chairman and gentlemen of the committee, I have submitted for the record a detailed statement on the operation in connection with the technical side of this program.

(The statement referred to follows:)

STATEMENT OF PERE F. SEWARD, DEPUTY COMMISSIONER, COMMUNITY FACILITIES ADMINISTRATION, HOUSING AND HOME FINANCE AGENCY, ON ASSISTANCE FOR SCHOOL CONSTRUCTION (TECHNICAL SERVICES)

The Housing and Home Finance Administrator has assigned to the Community Facilities Administration the responsibility for the administration of the technical services provided by the Agency under a working agreement with the Office of Education in connection with the school construction program authorized by Public Law 815, 81st Congress, as amended. The services provided cover the architectural, engineering, legal, and financial fields, both in the preliminary stages and during construction, as well as necessary staff activities to support these technical services.

The working agreement between the Housing Administrator and the Commissioner of Education is intended to accomplish the following major objectives:

1. To help provide more school facilities per dollar of Federal funds expended;
2. To help produce school buildings that are carefully planned architecturally and structurally to insure longer life, lower maintenance cost and greater utility, and maximum safety for students;
3. To assist the school districts in avoiding legal, financial and administrative difficulties; and
4. To ensure that the intent of Congress as set forth in the statute is carried out, including compliance with all applicable Federal laws and regulations pertinent to the expenditure of Federal funds and the Bacon-Davis Act.

To realize these objectives, we provide technical assistance to the Office of Education and to the local school district.

Technical services provided

A school district in a federally impacted area files with the Office of Education a request for financial assistance in the construction of school facilities. The application includes a brief description and cost estimate of the proposed construction projects for which assistance is requested. When the Commissioner approves the application, we receive a notice of fund reservation from the Office of Education for the specific project or projects in the approved application. The application has outlined the scope of the project, the type of construction desired, an estimate of the cost, from what source and in what amount from a monetary standpoint the district proposed to participate, the location of the proposed site, evidence of title to the site, a citation to its authority to construct, maintain and operate the proposed school and other pertinent detail. That material is examined in our field office and a recommendation based on the engineering, financial, and legal aspects of the project is submitted to our central office. We here review the findings of the field and prepare a recommendation to the Commissioner of Education. We also secure from the Department of Labor a determination as to the wage rates applicable to the proposed project for inclusion in the contract documents.

Upon the approval of the project by the Commissioner of Education, the school district and our Office are advised. The school district then employs its architect who prepares the detailed plans and specifications. The architect's contract is examined and concurred in by our regional office. Plans and specifications are in turn submitted to the State department of education, the field representative of the Office of Education, and to our regional office. There they are

checked for conformity to the project as approved by the Office of Education, for structural soundness, for their adaptability to competitive bidding, for non-restrictive use of materials, and other items. When the plans, specifications and proposed contract documents are approved, the school district is authorized to advertise for bids. The district is also provided with the wage rates predetermined by the Secretary of Labor for use in the construction of the project. After bids are received, tabulated and the low bidder determined, the school district awards the contract subject to the concurrence of our regional office. Before concurring in the award the regional office examines the tabulation of bids, the proposed award of the contract, the bond or bonds for performance, the necessary resolutions by the governing body of the school district, etc. When approved the contract is official. The field engineer works out with the architect and contractor the schedule of operations.

When work is undertaken, the field engineer makes periodic inspections to insure that the work done, and materials used are in conformity with the contract as regards type, quality, scope, and workmanship; that wage rates paid are in accord with the approved schedule; approves or modifies the necessary change orders; checks and recommends payments to the school district from the Federal allocation, checks all payments made on behalf of the project from the construction account; and performs other items of work as may be necessary in the accomplishment of the project.

The regional office works with the local school district in the preparation of the equipment schedules, the advertising and award of contracts for equipment, and the inventory and payment therefor.

The final inspection, acceptance of the work and certification for final payment, together with the final report on the project is the responsibility of our field force.

In the case of projects constructed on federally owned sites, the full responsibilities for all planning and construction operations are in the Housing and Home Finance Agency.

Program volume

The school construction program since 1950 has involved Federal assistance to the extent of \$876.05 million and local financial participation of an estimated additional \$425 million—a total building outlay of more than \$1.3 billion. It is estimated that these funds will provide for the construction of 4,136 school projects throughout the land. Except for some 260 temporary and permanent schools built or being built by the Federal Government on Federal properties, it is anticipated that all of these school projects will be constructed by local school districts with Federal financial and technical assistance.

The level of activity of the Office of the Administrator in connection with the school construction program is governed by two factors: First, the rate of fund reservations assigned to this Agency by the Commissioner of Education; and second, the rate of progress of construction activity of the individual projects. By the end of March 1959 a total of 3,815 fund reservations had been received from the Office of Education. At the same time construction had started on 3,550 of these projects and 3,150 had been completed.

Thus, some 400 projects are currently under construction and 265 others are in the preconstruction stages. Another 171 new project assignments are anticipated prior to the close of the current year. There will be two increments of new workload affecting the fiscal year 1960: First, 154 project assignments to be funded from the \$24.6 million supplemental appropriation already reported by the Houses of the Congress; and second, the projects which would be funded from new program appropriations in the annual bill.

Under the budget estimate of \$38.5 million, the projection of new assignments is 150 schools, while under the \$61.1 million appropriation enacted by the House, it is estimated that 300 new fund reservations would be assigned to the Agency. Under the latter assumption, there would be some 1,390 active projects in the Agency workload during the year.

Technical services requirements

The original budget request for technical services for 1960 was \$900,000—compared with the total of \$1 million available for the current year. The revised estimate, predicated upon the enactment of the \$24.6 million supplemental contained in both versions of the second supplemental appropriation bill for 1959 and upon the enactment of \$61.1 million for 1960 as contained in the House-passed annual bill, is \$1,150,000.

Effect of House action

The House increased the program appropriation from the budget estimate of \$38.5 million to \$61.1 million and the technical services authorization from the budget estimate of \$900,000 to \$1 million. The technical services authorization contained in the House bill is not adequate to support the staff required to handle the work that would be assigned to the Agency under the larger appropriation. If the Senate committee approves the larger program enacted by the House, the authorization for technical services of the Housing and Home Finance Agency should be increased to the revised estimate of \$1,150,000.

The workload for this Agency in fiscal 1960 will stem from three sources: (1) The existing pipeline of some 850 projects funded from appropriations already enacted; (2) an additional 154 projects to be funded from the \$24.6 million supplemental appropriation reported by both Houses of the Congress; and (3) the projects which would be funded from new program appropriations proposed for fiscal 1960.

If the \$61.1 million appropriation enacted by the House becomes law, an added 300 school projects will be brought into the Agency workload and total technical services requirements will amount to \$1,150,000—or \$150,000 above the amount in the House bill. If the appropriation were reduced to the budget estimate of \$38.5 million, technical services requirements are estimated at the \$1 million authorization contained in the House bill. While this figure is \$100,000 above the original budget estimate, the budget did not contemplate the enactment of the current year supplemental, nor the additional workload that will occur in 1960 as a result of that action.

The technical services authorization must be related directly to the number of school projects, actual and proposed, in the Agency's assigned workload. Accordingly, I strongly urge that as a part of the action of the committee with respect to the program appropriation level, the technical services authorization be established in accordance with the assumptions outlined above.

JUSTIFICATION

Mr. SEWARD. If I may, I would like to make a very short comment with reference to the justification for it.

Senator HILL. All right, sir.

Mr. SEWARD. For the past 9 years, the Community Facilities Administration of the Housing and Home Finance Agency has been providing technical services in connection with Public Law 815. The technical services authorization is an integral part of the program appropriation and is always related to the number of school projects, actual and proposed, that can be funded from such appropriations.

EFFECT OF HOUSE ACTION

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would be funded from new program appropriations proposed for fiscal 1960.

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Senator HILL. In other words, what you are telling us is the House increased the appropriations for the construction projects, but did not increase the amount for the technical services needed to carry through these projects.

Mr. SEWARD. That is generally true, Senator Hill. It just didn't exactly fall that way.

NO ADDITIONAL FUNDS FOR TECHNICAL SERVICES

The House put in the \$24.6 million supplemental, which had never been calculated anywhere in our figures.

Senator HILL. And with the \$24.6 million they did not put in any additional amount for technical services?

Mr. SEWARD. That is right. For the \$61 million they did allow an additional \$100,000 because of the increase from \$38.5 million to \$61.6 million, which is not sufficient.

Senator HILL. That is not sufficient?

Mr. SEWARD. No, sir.

Senator HILL. How much do you say you need in addition to the \$100,000, if the \$61.1 million remains in?

Mr. SEWARD. If the \$61.1 million remains the same and taking into the consideration the \$24.6 million supplemental which has already been added, then instead of needing \$1 million we need \$1,150,000 Senator.

Senator HILL. You need \$1,150,000 or \$150,000 above what the House has provided?

Mr. SEWARD. That is correct.

Senator MONRONEY. This is the federally impacted areas in connection with the school-building program?

Senator HILL. Technical services.

Senator MONRONEY. I know from experience they employ competent and apparently adequate architectural design specialists who built some tremendously modern and economical buildings.

Mr. SEWARD. We are very proud of them.

Senator MONRONEY. They are fine buildings. I can't quite relate, and I must apologize for being new on this committee and never having gone over this before, the funds that you are asking for the Housing and Home Finance Agency, and what function they perform for the school districts affected.

Mr. SEWARD. Senator Monroney, that is covered in detail in the statement which I have submitted, sir. I will be glad to, if I may, read from that statement.

Senator MONRONEY. I have been looking at it, but I just wondered how this differed from those rather competent architectural design people that are employed by the school districts.

Dr. DERTHICK. Mr. Hughes might make a little comment there that would be helpful.

WORK OF TECHNICAL SERVICES GROUP

Mr. HUGHES. The technical services that are performed by the Housing and Home Finance Agency are to satisfy certain requirements that are in the Federal statute to be sure that the Federal interest is protected in connection with a building project that has been authorized under Public Law 815. The work of the Housing and Home Finance Agency is not in any way to displace or replace the architectural services provided by the local architect. Rather, it is to carry out certain specific inspections that the Federal act requires, which work has been assigned to the Housing and Home Finance Agency under an agreement negotiated between the Commissioner of Community Facilities and the Commissioner of Education.

I suppose Mr. Seward could speak more precisely to those requirements.

Senator MONRONEY. This is about 5 percent of the cost?

COST OF SERVICES

Mr. SEWARD. No, sir; not 5 percent. Our figures on our cost on this work, Senator Monroney, taking everything into consideration, amount to less than three-quarters of 1 percent of the cost of the projects. That is over a 9-year period, sir.

Senator HILL. You have been running this service for the past 9 years, have you not?

Mr. SEWARD. Yes, sir. Ever since the inception of the program, Senator Hill.

Dr. DERTHICK. This is a service, Senator, that we have to provide under the law, and it seems to us that we can do it more economically using this facility of the Government that is already set up rather than to set up an agency ourselves.

Senator MONRONEY. I agree with that, but I was just wondering about this million and a half figure related to possibly expenditures of \$38.5 million.

CONSTRUCTION WORKLOAD

Mr. KELLY. I think you have to understand, Senator, that the calculation of workload for any given fiscal year relates to the construction in progress and the construction which is anticipated during that year. Some of the appropriated funds here stimulate work in 1960 and as a result of this congressional action a careful reestimate has been made of the number of projects that will be in the various stages of construction, and the requirement of the Housing and Home Finance Agency is to protect the Federal interest in determining that the law has been met with respect to the payment of prevailing wages, that the Federal funds are used for minimum facilities, and to inspect the construction to see that it is proceeding in accordance with those requirements.

Senator MONRONEY. They inspect to see that the structural work is proper, and properly fireproofed, and things of that kind?

Mr. SEWARD. Yes, sir.

Senator MONRONEY. That is a personal onsite inspection?

Mr. SEWARD. Yes, sir.

Senator HILL. Any other questions, Senator Monroney?

Senator MONRONEY. No, sir.

JOINT STATEMENT

Senator HILL. Senators Humphrey and McCarthy have requested that their joint statement in support of appropriations to pay 100 percent of entitlements under Public Laws 815 and 874 be included in the record of these proceedings. Their statement will be inserted at this point in the record.

(The statement referred to follows:)

STATEMENT OF SENATOR HUBERT H. HUMPHREY AND SENATOR EUGENE MCCARTHY IN SUPPORT OF INCREASED APPROPRIATIONS FOR AID TO FEDERALLY IMPACTED SCHOOL DISTRICTS

Mr. Chairman, we are grateful for this opportunity to speak in support of increased appropriations for the Office of Education to pay 100 percent of entitlements under Public Law 874 and Public Law 815.

The fiscal 1960 budget requests \$142,300,000 for payments to schools in federally impacted areas for maintenance and operation as authorized by Public Law 874, and requests \$38,500,000 for school construction grants to local educational agencies in federally impacted areas as authorized by Public Law 815. These requests fall short of the expectations of the Office of Education, as well as the expectations of the affected school districts.

The Congress has a responsibility, indeed an obligation, to follow through on its commitments to appropriate adequate funds to aid federally impacted school districts. If we renege at this point we will show little faith in our own recommendations. What is more, a cutback such as is proposed by the President would certainly disrupt many educational activities and programs which have either been started or planned by affected school districts with the assumption that the promised funds would be forthcoming.

Therefore, we strongly urge the committee to appropriate at least \$163,957,000 for school operating expenses and at least \$61,135,000 for school construction. These appropriations will enable the Office of Education to pay 100 percent of entitlements under the authorizing legislation.

DEFENSE EDUCATIONAL ACTIVITIES

**STATEMENTS OF L. G. DERTHICK, COMMISSIONER OF EDUCATION;
ACCOMPANIED BY JOHN F. HUGHES, EXECUTIVE OFFICER; JOHN
R. LUDINGTON, DIRECTOR, AID TO STATE AND LOCAL SCHOOL
BRANCH, DIVISION OF STATE AND LOCAL SCHOOL SYSTEMS; AND
HOMER D. BABIDGE, DIRECTOR, FINANCIAL AID BRANCH, DIVI-
SION OF HIGHER EDUCATION**

APPROPRIATION ESTIMATE

"For grants, loans, and payments under the National Defense Education Act of 1958 **[\$40,000,000]** (72 Stat. 1580-1605), \$150,000,000, of which **[\$6,000,000]** \$30,000,000 shall be for capital contributions to student loan funds; **[\$19,000,000]** \$1,000,000 shall be for loans for non-Federal capital contributions to student loan funds; \$60,000,000 for grants to States and loans to nonprofit private schools for science, mathematics, and modern language teaching facilities and **[\$1,350,000]** \$4,000,000 for grants to States for supervisory and other services; **[\$3,750,000]** \$7,000,000 for grants to States for area vocational educa-

tion programs; and **[\$5,400,000]** \$15,000,000 for grants to States for testing, guidance, and counseling**[: Provided, That this paragraph shall be effective only upon enactment into law of H.R. 13247; Eighty-fifth Congress]**.

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Actual appropriations.....	\$40,000,000	\$150,000,000	\$150,000,000
Supplemental appropriation.....	75,300,000		
Total available for obligation.....	115,300,000	150,000,000	150,000,000

Obligations by activities

Description	1959 estimate	1960 estimate	House allowance
Student loans:			
(a) Contribution to loan funds.....	\$30,500,000	\$30,000,000	\$30,000,000
(b) Loans to educational institutions.....	500,000	1,000,000	1,000,000
Science, mathematics, and foreign language instruction:			
(a) Acquisition of equipment and minor remodeling:			
(1) Grants to States.....	49,280,000	52,800,000	52,800,000
(2) Loans to non-profit private schools.....	6,720,000	7,200,000	7,200,000
(b) Grants to States for supervision and administration.....	1,350,000	4,000,000	4,000,000
National defense fellowships.....	5,300,000	13,450,000	13,450,000
Guidance, counseling, and testing:			
(a) Grants to States.....	7,400,000	15,000,000	15,000,000
(b) Institutes for counseling personnel.....	3,000,000	5,000,000	5,000,000
Advanced training in foreign areas and languages:			
(a) Training centers.....	1,000,000	3,050,000	3,050,000
(b) Institutes for language teachers.....	1,500,000	3,000,000	3,000,000
(c) Research.....	2,500,000	4,000,000	4,000,000
Educational media research.....	1,500,000	3,000,000	3,000,000
Grants to States for area vocational programs.....	3,750,000	7,000,000	7,000,000
Grants to States for statistical services.....	1,000,000	1,500,000	1,500,000
Total obligations.....	115,300,000	150,000,000	150,000,000

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
07 Other contractual services.....	\$2,500,000	\$4,000,000	\$4,000,000
11 Grants, subsidies, and contributions.....	112,800,000	146,000,000	146,000,000
Total obligations.....	115,300,000	150,000,000	150,000,000

Comparison, 1959 appropriations, 1960 authorizations

Defense educational activities	1959 appropriation	1960 authorization	Budget estimate and House allowance
Title II: Student loan funds.....	\$31,000,000	\$75,000,000	¹ \$31,000,000
Title III: Science, mathematics, and foreign language instruction:			
(a) Acquisition of equipment and minor remodeling.....	56,000,000	70,000,000	60,000,000
(1) Grants to States.....	(49,280,000)	(61,600,000)	(52,800,000)
(2) Loans to nonprofit private schools.....	(6,720,000)	(8,400,000)	(7,200,000)
(b) Grants to States for supervision and administration.....	1,350,000	5,000,000	4,000,000
Title IV: National defense fellowships.....	5,300,000	² 13,450,000	13,450,000
Title V: Guidance, counseling, and testing:			
(a) Grants to States.....	7,400,000	15,000,000	15,000,000
(b) Institutes for counseling personnel.....	3,000,000	7,250,000	5,000,000
Title VI: Advanced training in foreign areas and languages:			
(a) Training centers and research.....	3,500,000	8,000,000	7,050,000
(1) Training centers.....	(1,000,000)		(3,050,000)
(2) Research.....	(2,500,000)		(4,000,000)
(b) Institutes for language teachers.....	1,500,000	7,250,000	3,000,000
Title VII: Educational media research.....	1,500,000	5,000,000	3,000,000
Title VIII: Grants to States for area vocational programs.....	3,750,000	15,000,000	7,000,000
Title X: Grants to States for statistical services.....	1,000,000	³ 1,500,000	1,500,000
Total.....	115,300,000	222,450,000	150,000,000

¹ Includes estimated \$1,000,000 for Federal loans to educational institutions for non-Federal share of loan funds (\$25,000,000 authorized as necessary).
² Estimated requirements to finance 1,500 authorized new fellowships in 1960 and 1,000 2d-year fellowships.
³ Estimated requirements; indefinite amount authorized but no State may receive in excess of \$50,000 for any 1 fiscal year.

Allotments by States (including outlying parts of the United States) under title II, for loans to students in institutions of higher education

[Based on estimate for fiscal year ending June 30, 1960]

Allotment			
Aggregate United States..	\$30,000,000	Continental United States	
Continental United States..	29,750,426	—Continued	Allotment
Alabama.....	443,127	New York.....	\$3,117,210
Arizona.....	198,526	North Carolina.....	691,082
Arkansas.....	237,765	North Dakota.....	126,244
California.....	2,858,497	Ohio.....	1,368,819
Colorado.....	405,579	Oklahoma.....	550,484
Connecticut.....	416,053	Oregon.....	366,965
Delaware.....	58,283	Pennsylvania.....	1,770,960
Florida.....	532,278	Rhode Island.....	158,775
Georgia.....	491,448	South Carolina.....	328,437
Idaho.....	114,051	South Dakota.....	136,875
Illinois.....	1,528,590	Tennessee.....	551,137
Indiana.....	871,786	Texas.....	1,723,449
Iowa.....	569,855	Utah.....	302,301
Kansas.....	487,539	Vermont.....	100,080
Kentucky.....	387,360	Virginia.....	483,119
Louisiana.....	525,627	Washington.....	527,858
Maine.....	114,292	West Virginia.....	264,029
Maryland.....	407,626	Wisconsin.....	677,311
Massachusetts.....	1,248,402	Wyoming.....	48,136
Michigan.....	1,278,091	District of Columbia..	356,378
Minnesota.....	675,747		
Mississippi.....	328,593	Outlying parts of the	
Missouri.....	710,339	United States.....	249,574
Montana.....	117,746		
Nebraska.....	286,313	Alaska.....	6,736
Nevada.....	21,815	Canal Zone.....	2,160
New Hampshire.....	123,274	Guam.....	853
New Jersey.....	537,238	Hawaii.....	72,324
New Mexico.....	124,937	Puerto.....	167,501
		Virgin Islands.....	

Allotments to States (including outlying parts of the United States) under title III, for strengthening instruction in science, mathematics, and modern foreign languages

[Based on estimates for fiscal year ending June 30, 1960]

State	For acquisition of equipment and minor remodeling		For State administration of grants to public schools
	Grants for public schools	Loans to non-profit private schools	
Aggregate United States.....	\$52, 800, 000	\$7, 200, 000	\$4, 000, 000
Continental United States.....	51, 600, 000	7, 076, 957	3, 920, 000
Alabama.....	1, 528, 889	37, 028	84, 371
Arizona.....	455, 049	32, 309	27, 693
Arkansas.....	841, 783	13, 991	46, 453
California.....	2, 602, 703	393, 569	287, 257
Colorado.....	533, 156	48, 283	37, 619
Connecticut.....	423, 590	111, 564	46, 751
Delaware.....	81, 831	22, 767	20, 000
Florida.....	1, 172, 534	66, 932	83, 180
Georgia.....	1, 773, 492	23, 533	97, 870
Idaho.....	287, 906	8, 986	20, 000
Illinois.....	1, 862, 554	662, 935	201, 596
Indiana.....	1, 375, 183	157, 112	102, 436
Iowa.....	961, 306	112, 435	63, 030
Kansas.....	679, 983	60, 050	47, 049
Kentucky.....	1, 415, 572	102, 517	78, 117
Louisiana.....	1, 429, 953	172, 304	78, 911
Maine.....	348, 126	49, 305	21, 639
Maryland.....	797, 941	152, 979	64, 618
Massachusetts.....	1, 032, 426	331, 625	99, 954
Michigan.....	2, 122, 643	382, 132	177, 079
Minnesota.....	1, 156, 697	188, 579	76, 827
Mississippi.....	1, 084, 606	26, 689	59, 854
Missouri.....	1, 175, 340	189, 541	90, 028
Montana.....	236, 644	24, 044	20, 000
Nebraska.....	480, 113	60, 861	31, 763
Nevada.....	50, 372	5, 199	20, 000
New Hampshire.....	176, 963	46, 179	20, 000
New Jersey.....	1, 036, 931	376, 692	114, 446
New Mexico.....	413, 688	34, 623	22, 830
New York.....	2, 938, 148	1, 079, 360	324, 282
North Carolina.....	2, 108, 047	20, 257	116, 332
North Dakota.....	294, 975	23, 638	20, 000
Ohio.....	2, 348, 953	447, 953	203, 383
Oklahoma.....	904, 539	23, 969	53, 699
Oregon.....	537, 986	39, 252	39, 704
Pennsylvania.....	2, 967, 772	735, 438	236, 635
Rhode Island.....	196, 173	66, 917	20, 000
South Carolina.....	1, 199, 730	12, 277	66, 206
South Dakota.....	303, 986	20, 032	20, 000
Tennessee.....	1, 563, 046	38, 290	86, 257
Texas.....	3, 509, 752	171, 493	220, 158
Utah.....	390, 404	6, 281	22, 234
Vermont.....	146, 368	23, 833	20, 000
Virginia.....	1, 472, 716	59, 433	89, 334
Washington.....	761, 949	61, 808	61, 045
West Virginia.....	944, 308	20, 287	52, 111
Wisconsin.....	1, 240, 335	291, 848	87, 249
Wyoming.....	111, 428	5, 500	20, 000
District of Columbia.....	121, 411	34, 278	20, 000
Outlying parts of the United States.....	1, 200, 000	123, 043	80, 000
Alaska.....	50, 000	2, 750	10, 000
Canal Zone.....	50, 000	676	10, 000
Guam.....	50, 000	3, 351	10, 000
Hawaii.....	153, 105	40, 183	10, 000
Puerto Rico.....	846, 895	72, 597	30, 000
Virgin Islands.....	50, 000	3, 486	10, 000

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Allotments to States (including outlying parts of the United States) under title V, par A, for guidance, counseling, and testing (identification and encouragement of able students)

[Based on estimate for fiscal year ending June 30, 1960]

	<i>Allotment</i>		<i>Allotment</i>
Aggregate United States_	\$15, 000, 000	New Mexico_	\$87, 405
Continental United States_	14, 700, 000	New York_	1, 241, 531
Alabama_	323, 018	North Carolina_	445, 385
Arizona_	106, 026	North Dakota_	62, 324
Arkansas_	177, 850	Ohio_	778, 664
California_	1, 099, 783	Oklahoma_	205, 592
Colorado_	144, 028	Oregon_	152, 009
Connecticut_	178, 990	Pennsylvania_	905, 972
Delaware_	34, 582	Rhode Island_	66, 124
Florida_	318, 458	South Carolina_	253, 474
Georgia_	374, 701	South Dakota_	64, 224
Idaho_	62, 704	Tennessee_	330, 239
Illinois_	771, 824	Texas_	842, 889
Indiana_	392, 182	Utah_	85, 125
Iowa_	241, 314	Vermont_	33, 822
Kansas_	180, 130	Virginia_	342, 020
Kentucky_	299, 077	Washington_	233, 713
Louisiana_	302, 117	West Virginia_	199, 511
Maine_	82, 845	Wisconsin_	334, 039
Maryland_	247, 394	Wyoming_	29, 262
Massachusetts_	382, 682	District of Columbia_	51, 303
Michigan_	677, 959		
Minnesota_	294, 137	Outlying parts of the	
Mississippi_	229, 153	United States_	300, 000
Missouri_	344, 680		
Montana_	61, 183	Alaska_	20, 000
Nebraska_	121, 607	Canal Zone_	20, 000
Nevada_	21, 281	Guam_	20, 000
New Hampshire_	47, 503	Hawaii_	33, 683
New Jersey_	438, 165	Puerto Rico_	186, 317
		Virgin Islands_	20, 000

Allotments to States (including outlying parts of the United States) under title VIII for area vocational education program

[Based on estimates for fiscal year ending June 30, 1960]

<i>Allotment</i>		<i>Allotment</i>	
Aggregate United States---	\$7, 000, 000	Continental United States—	
Continental United States---	6, 727, 893	continued	
Alabama-----	194, 565	New Mexico-----	\$37, 454
Arizona-----	34, 194	New York-----	397, 642
Arkansas-----	144, 781	North Carolina-----	280, 948
California-----	323, 209	North Dakota-----	53, 056
Colorado-----	57, 671	Ohio-----	299, 160
Connecticut-----	61, 025	Oklahoma-----	123, 972
Delaware-----	33, 005	Oregon-----	71, 743
Florida-----	105, 427	Pennsylvania-----	358, 500
Georgia-----	207, 686	Rhode Island-----	34, 404
Idaho-----	40, 592	South Carolina-----	142, 600
Illinois-----	291, 267	South Dakota-----	52, 347
Indiana-----	181, 340	Tennessee-----	207, 164
Iowa-----	160, 072	Texas-----	349, 036
Kansas-----	102, 738	Utah-----	31, 961
Kentucky-----	197, 752	Vermont-----	31, 961
Louisiana-----	140, 474	Virginia-----	183, 836
Maine-----	45, 493	Washington-----	99, 284
Maryland-----	85, 019	West Virginia-----	115, 478
Massachusetts-----	123, 675	Wisconsin-----	173, 008
Michigan-----	239, 428	Wyoming-----	31, 961
Minnesota-----	162, 553	District of Columbia--	34, 264
Mississippi-----	184, 626		
Missouri-----	196, 112	Outlying parts of the	
Montana-----	37, 471	United States-----	272, 107
Nebraska-----	80, 597		
Nevada-----	31, 961	Alaska-----	35, 780
New Hampshire-----	31, 961	Guam-----	18, 940
New Jersey-----	123, 420	Hawaii-----	33, 319
		Puerto Rico-----	174, 598
		Virgin Islands-----	9, 470

PREPARED STATEMENT

(The prepared statement follows:)

STATEMENT OF COMMISSIONER OF EDUCATION ON DEFENSE EDUCATIONAL ACTIVITIES

The National Defense Education Act has as its purpose the strengthening of our national security through a series of critically needed improvements in educational practices and programs. To implement this enactment, the Congress authorized an interim appropriation of \$40 million for grants and payments for the fiscal year 1959, pending congressional review of full first-year requirements. A supplemental estimate of \$75,300,000 is now proposed, which would provide a total of \$115,300,000 for the fiscal year 1959.

During the relatively short period this law has been in effect, the States and the institutions of higher learning have cooperated most willingly and effectively with the Office of Education in achieving a successful launching of the newly authorized programs. Activities have now been initiated under each of the various titles of the act following the drafting and promulgation of regulations, the development of procedures and forms governing qualification for Federal funds, and the provision of specific advice to States and institutions on requirements for participation through conferences and correspondence. State plans are rapidly being developed and approved under those titles providing for grants to States, and programs are now in varying stages of operation in those titles providing for assistance to higher education institutions. In several instances the lack of funds to complete the programs authorized for this year has become a serious handicap and for this reason the supplemental funds already mentioned are urgently required as soon as possible.

The programs launched in fiscal year 1959 will of course be effective for the first full year in fiscal year 1960. While it has been most important to accom-

plish as much as possible in this first crucial year in order to assure fullfledged operation of programs by the school year 1959-60, it is also important that we move forward quickly in fiscal year 1960 to reach closer to the goals established by the Congress in the authorizing statute. For this purpose, the President has requested additional funds totaling \$34.7 million in fiscal year 1960 which will bring the total request to \$150 million to be spent as follows:

Student loans (title II)

Contributions to loan funds (\$30 million).—The student loan program authorized by the National Defense Education Act, provides for the creation, at American colleges and universities, of loan funds from which needy students may borrow on reasonable terms for the purpose of completing their higher education. Funds are allotted among the States in accordance with a prescribed formula. The participating institutions are required to contribute a sum equal to one-ninth of the amount contributed by the Federal Government.

Within conditions prescribed by law and the Commissioner's regulations, the institution itself selects the student recipients, arranges the loans, and has responsibility for their collection.

Within the \$75 million authorized in the law for fiscal year 1960, \$30 million is requested to continue and extend student loans to needy students enrolled in the colleges and universities. It is estimated that about 1,200 institutions will participate in this program, and provide loans to approximately 80,000 students.

Loans to educational institutions (\$1 million).—In the event an institution is unable to obtain funds to contribute its share, it may under certain conditions borrow from the Federal Government to provide for the non-Federal capital contribution. An amount of \$1 million is requested to provide Federal loans to institutions to assist in providing the institutional share.

Science, mathematics, and foreign language instruction (title III)

(a) *Acquisition of equipment and minor remodeling*—(1) *Grants to States (\$52,800,000).*—Title III of the National Defense Education Act authorizes grants to States and loans to private nonprofit schools for acquisition of laboratory and other special equipment and for minor remodeling incidental to the use of such equipment for the purpose of strengthening elementary and secondary school instruction in science, mathematics, and foreign languages. State grants are also provided for expanded supervisory and related services, such as employment of full-time States science supervisors and also for costs of administration of State plans required under the act.

Modern laboratory and classroom equipment is essential to sound instruction in these subjects of science, mathematics, and foreign languages which are so closely linked to our future national security. A serious shortage of this equipment exists, and has existed for some time, in our public school systems. For example, it is estimated that only one secondary school in five has rooms adequately equipped for science teaching.

An amount of \$52,800,000 is requested for grants to States for acquisition of equipment and minor remodeling; the States must match Federal funds on a 50-50 basis. This represents an increase of \$3,520,000 over the requested appropriations for fiscal year 1959. It also represents over 85 percent of the maximum of \$61.6 million yearly authorization for this activity under the act.

The amount requested reflects a conservative estimate of the requirements of the States for fiscal year 1960 as indicated by reviews of State plans already submitted and by numerous discussions with State educational officials. Success in this grant program will contribute greatly to laying the foundation for the nationwide improvement of instruction in these significant subject matter areas.

(2) *Loans to nonprofit private schools (\$7,200,000).*—An amount of \$7,200,000 is requested for loans to nonprofit private elementary and secondary schools for the acquisition of equipment and minor remodeling. Loan funds are allotted on a State basis in terms of enrollment in private schools as a percentage of the total of such enrollment in all States. Loans in each State are made on the basis of satisfactory applications received and conditions established by the Commissioner.

Except for the relatively few heavily endowed private schools, the estimated 16,000 nonprofit private schools are just as much in need of assistance as the public schools.

The estimate for 1960, \$7,200,000, represents an increase of \$480,000 over the requested appropriation for 1959.

(b) *Grants to States for supervision and administration (\$4 million).*—An amount of \$4 million is requested for grants to States for supervision and administration. This is an increase of \$2,650,000 over the appropriation for fiscal year 1959. The law authorizes a maximum Federal appropriation of \$5 million.

Expansion and improvement of State supervisory services for science, mathematics, and foreign language is the principal objective of this grant activity. These supervisors will be concerned not only with strengthening instruction and improving curricula in their respective fields; they will also assist local school systems directly in planning for and making maximum use of the many kinds of new equipment which will be acquired under programs made possible by the act.

The amount requested, \$4 million (which will be matched by State funds), is based upon reviews of State plans already submitted and numerous discussions with State education officials.

National defense fellowships (title IV) (\$13,450,000)

The national defense graduate fellowship program is directed to encourage and assist in the expansion and improvement of facilities for graduate education and to increase the supply of well-trained college and university teachers. Graduate programs to be eligible for participation must be either new or expanded and must be found by the Commissioner to be a substantial addition to the Nation's graduate training facilities and a contribution to a wider geographic dispersion of such facilities. Fellowships are awarded to persons who have been accepted by the institution offering a program the Commissioner has approved. In addition to the amount of fellowship paid to the recipient fellow, the institution is given an accompanying grant of not to exceed \$2,500 for each fellowship to defray attributable costs. Each fellowship awarded may be used by the recipient for 3 years and carries a stipend of \$2,000 for the first academic year of study after baccalaureate degree, \$2,200 for the second year, and \$2,400 for the third year, plus \$400 for each dependent. Title IV of the act authorizes "such sums as may be necessary" to provide 1,000 fellows for the year beginning July 1, 1958, and 1,500 for each of the next 3 years. The sum of \$13.45 million is requested for fiscal year 1960 to continue a second year the 1,000 fellowships to be awarded in fiscal year 1959, and to pay for the first-year costs of 1,500 additional fellows authorized for fiscal year 1960.

Guidance, counseling, and testing (title V)

(a) *Grants to States (\$15 million).*—An amount of \$15 million is requested under title V of the act to provide grants to States to assist in the establishment and maintenance of well-rounded programs of testing, guidance, and counseling in public secondary schools. Such programs will provide advice to students as to the courses of study best suited to them and encouragement of outstanding students to continue their education.

Funds are allotted among the States on the basis of the school-age population and the States must match the Federal funds. Small portions of individual State allotments must be withheld by the Office of Education to arrange for testing services in those cases where the State educational agency cannot legally make the services available for private secondary school students.

States are authorized to use the funds allotted to employ State supervisory personnel, to sponsor in-service training workshops for key people at the local level, to provide additional guidance and counseling personnel at the local level, and to provide for purchase and scoring of test material.

The request for \$15 million, the total amount authorized, represents an increase of \$7,600,000 over requested appropriations for the fiscal year 1959. Evidence submitted by the States indicates they are prepared to use the additional amount requested.

(b) *Institutes for counseling (\$5 million).*—Part B of title V of the act authorizes the Commissioner of Education to arrange by contract with institutions of higher education for the operation by them of institutes for the purpose of improving the qualifications of personnel engaged in counseling and guidance of students in secondary schools, or of teachers in secondary schools preparing to engage in such counseling and guidance. The institutes, which may be short-term summer sessions or regular sessions, are intended to assist in the training of the professional personnel who carry out the programs of counseling and guidance in the secondary schools that are encouraged by the act. The act provides that eligible students may receive a stipend at the rate of \$75 per week for the period of attendance, plus \$15 per week for each dependent.

Of the \$7.25 million authorized in the act \$5 million is being requested for fiscal year 1960, an increase of \$2 million over the estimate for the current year. The increase will enable expansion of the program to increase the number of short-term and regular institutes and thus provide training for more than 5,000 trainees in 1960.

Advanced training in foreign areas and languages (title VI)

(a) *Training centers (\$3,050,000).*—The language development program seeks to improve the Nation's proficiency in other peoples' languages. The act authorizes the Commissioner to arrange by contract with institutions of higher education for paying one-half the costs of establishing and operating centers for teaching of modern foreign languages for which he finds a national need for persons proficient in such languages, and for which adequate instruction in the language is not readily available in this country. Fellowships averaging \$3,500 will be paid to graduate students receiving advanced training in such critical languages.

An amount of \$3,050,000 is requested to expand this program in 1960, which represents an increase of \$2,050,000. The requested appropriation will provide for the expansion to full operating strength of the 14 centers established in the current year, the establishment of 6 additional centers and a marked increase in the number of trainees.

(b) *Institutes for language teachers (\$3 million).*—The act authorizes the Commissioner to arrange by contract with institutions of higher education for short-term or regular session institutes for advanced training for persons engaged in, or preparing to engage in teaching (or supervising or training teachers) of modern foreign languages in elementary or secondary schools. Stipends at the rate of \$75 per week, plus \$15 per week for each dependent will be paid institute trainees who are or will be engaged in teaching of language at public elementary or secondary schools.

An amount of \$3 million is requested for 1960, an increase of \$1.5 million. The requested appropriation will provide for 40 short-term institutes and 1,926 trainees, and five full-year institutes and 250 students.

(c) *Research (\$4 million).*—The act also authorizes the Commissioner directly, or by contract, (a) to make studies and surveys to determine the need for increased or improved instruction in modern foreign languages and other area studies needed to provide full understanding of the areas, regions or countries in which such languages are commonly used; (b) to conduct research on more effective methods of teaching such languages and other fields; and (c) to develop specialized materials for use in such training, or in training teachers of such languages or in such fields.

The areas of research and studies requiring immediate attention fall roughly into the following: (1) Development of basic instructional material and research into the operation of language and area centers; (2) development of basic instructional material for teaching in elementary and secondary schools; (3) development and validation of batteries of tests for measuring levels of achievement in various language skills; (4) research and experimentation in the psychology of language learning; and (5) special studies to determine the status of language study and teaching in institutions of higher education.

An amount of \$4 million is requested for these purposes for 1960, an increase of \$1,500,000 over the amount requested for fiscal year 1959.

Educational media research (title VII) (\$3 million)

The National Defense Education Act of 1958 presents a unique opportunity to increase greatly both the scope and quality of American education. The provisions set forth in title VII of the act provide for research, experimentation, and related dissemination activities to discover and encourage the more effective uses of television, radio, motion pictures, filmstrips, video tapes and related media. While the invention and development of new media is one of the most significant factors in improvement of our educational potential, the values of these devices will not be fully realized unless systematic research is undertaken on their effective use in the classroom.

An amount of \$3 million is being requested for fiscal year 1960 to provide for grants and contracts to support the implementation of title VII. This amount represents an increase of \$1,500,000 over appropriations requested for fiscal year 1959. The funds requested will support grants in the amount of \$2,250,000 for research and experimentation in the educational media, and \$750,000 will be used for development of a full program of dissemination, in-

cluding the support of appropriate surveys and studies. Applications already received in fiscal year 1959 indicate a strong interest in this assistance.

Grants to States for area vocational programs (title VIII) (\$7 million)

Most States have already submitted amendments to their State plans for vocational education, thereby qualifying for benefits under title VIII of the act which provides for area vocational education programs designed to train highly skilled technicians.

The most significant provision of this title is the training of highly skilled technicians in occupations necessary for the national defense with special attention given to geographical areas not previously or adequately served. Youth in many communities where job opportunities are limited will have greatly increased opportunities to serve more effectively in the national defense.

It is expected that most of the programs will be offered at the post-high-school level and for adults. The programs will serve youth who are interested in training for employment rather than further or higher education, and who have capabilities in technology. Classes will also be established to upgrade persons already employed in technical occupations.

Existing machinery for administration of State-local vocational education will be used to promote and administer this program. However, engineers or highly skilled technicians who have had experience in industry, the Armed Forces, or research and design will be employed in the program as consultants and instructors.

An amount of \$7 million is requested for fiscal year 1960, an increase of \$3,250,000 over the amount provided in 1959. It is anticipated that the States will be prepared to match and utilize the additional funds to maintain and improve programs established in 1959 and to establish many new programs in 1960.

Grants to States for improvement of statistical services (title X) (\$1,500,000)

Section 1009 of the National Defense Education Act authorizes grants to assist the States to improve and strengthen the adequacy and reliability of educational statistics provided by State and local reports and records, and the methods and techniques for collecting and processing educational data and disseminating information about the condition and progress of education in the States. State funds must equally match Federal allotments which are limited to \$50,000 per State.

Through the strengthening of State educational agency statistical services, the Nation will benefit by having available more reliable and comparable basic data about the condition and progress of education in the United States.

We are requesting an appropriation of \$1,500,000 for the fiscal year 1960, an increase of \$500,000 over the amount requested for 1959. It is anticipated that all States will participate in the program in 1960.

In summary, I wish to emphasize that the National Defense Education Act presents this Nation with a precious opportunity to strengthen and enrich educational programs in ways which are vital both to our national security and our economic and social progress. We accept without reservation the challenge presented by the Congress in enacting this farsighted legislation to bring about the improvements made possible. We have enjoyed the wholehearted cooperation of education officials throughout our several systems. We are confident of the desire of Congress to see these programs fulfilled in every way possible so as to achieve the goals which are basic to their success. We look forward to the coming fiscal year with enthusiasm and confidence.

Summary of changes

	<i>Amount</i>
1959 actual appropriation.....	\$40,000,000
1959 supplemental appropriation.....	75,300,000
<hr/>	<hr/>
Total appropriation.....	115,300,000
1960 appropriation request.....	150,000,000
<hr/>	<hr/>
Net change requested.....	+34,700,000

Summary of changes—Continued

	1960 budget estimate	1960 House allowance
Program increases:		
Science, mathematics, and foreign language instruction.....	\$6, 650, 000	\$6, 650, 000
National defense fellowships.....	8, 150, 000	8, 150, 000
Guidance, counseling, and testing.....	9, 600, 000	9, 600, 000
Advanced training in foreign areas and languages.....	5, 050, 000	5, 050, 000
Educational media research.....	1, 500, 000	1, 500, 000
Grants to States for area vocational programs.....	3, 250, 000	3, 250, 000
Grants to States for statistical services.....	500, 000	500, 000
Gross increase.....	34, 700, 000	34, 700, 000

DEFENSE EDUCATIONAL ACTIVITIES

Senator HILL. Doctor, what about these defense educational activities? I have a little interest there, you know.

Dr. DERTHICK. Yes, sir; you certainly do, and it has been that interest of yours and our other friends that have driven us day and night and weekends, and we are pretty proud of the progress that has been made in that program.

Senator HILL. I know you have worked hard on it.

Dr. DERTHICK. Yes, sir. We had lots of help all over the country. It has been truly a partnership undertaking. We think with having all of these titles fully activated that we have made very encouraging progress and we do not take credit for that ourselves so much as we do the cooperation that we have had in the Congress and in the field and among the institutions. It has really been a thrilling experience.

ESTIMATE FOR FISCAL YEAR 1960

Senator HILL. Would you like us to take this up title by title? You have here an estimate for \$150 million for the Congress' consideration for the coming fiscal year.

Dr. DERTHICK. Yes, sir.

Senator HILL. That is short of the amount authorized last year.

Dr. DERTHICK. Yes, sir. Maybe what we had better do is to say, for example, under the student loan program, why we did not ask for more money.

Senator HILL. That is it. That is what I want.

STUDENT LOAN PROGRAM

Dr. DERTHICK. The student loan program, of course, is very tentative. None of us knows just how it is going to take hold. It is true that a great many more institutions have expressed an interest than we anticipated. We thought perhaps about 700 institutions would apply and we have something over 1,200 who are seeking to participate, but we are not just sure how far the students are going to follow through in borrowing this money. On the assurance that if we had underestimated, the administration would authorize us to come back and ask for a supplemental, and not being truly sure of ourselves on this, we have made a request for the \$31 million in 1959 and another \$31 million in 1960. Of course, that means that we have about \$62 million going into the institutions over a period of a few months, because we did not get started until late in 1959.

Senator HILL. Of course the supplemental is just coming.

Dr. DERTHICK. That is right. It is coming so late. So we have about \$62 million involved and the fact that we have that amount of money going in in a short space of time, and not being sure just how the students are going to take hold of it, we rested on that assurance that we could come back for a supplemental if we needed to.

Senator HILL. And you have that assurance?

Dr. DERTHICK. Yes, sir.

ESTIMATE AND AUTHORIZATION

Senator HILL. The \$31 million is how much, for the sake of the record, short of the authorization?

Dr. DERTHICK. The authorization is \$75 million.

Senator HILL. That is what I was thinking. However, you will have, when this supplemental passes, that and the additional in the estimate where you are asking for \$31 million here.

Dr. DERTHICK. Yes, sir.

Senator HILL. Which will give you what?

TOTAL FUNDS IN PROGRAM

Dr. DERTHICK. About \$62 million.

Mr. HUGHES. \$62 million total, sir, of which about \$1.5 million would be for the loans to the institutions, to cover their non-Federal share.

Senator HILL. Do you find many of the institutions are going to have to come in to get their loans?

Dr. DERTHICK. We have had a few come in this first time and I think the indications are that there will probably be more next year.

Senator HILL. However, you have the assurance that if these funds are not sufficient you can come back for a supplemental?

Dr. DERTHICK. Yes, sir; we have had that assurance repeatedly. We have the assurance that we can come back for a supplemental, and I might emphasize that by pointing out this, Mr. Chairman: That in the fellowship title, for example, we knew exactly how much money we were going to need there and we were authorized to ask for the full amount we needed. However, in these titles where we couldn't be sure, we felt that it was the better policy to make a more conservative estimate since it was a new and untried program, with the assurance we could come back, and that applies not only to the loan title, but to all of these titles.

Senator HILL. All of the titles in the act?

Dr. DERTHICK. Yes, sir.

Senator HILL. You mean that you could come back for a supplemental?

Dr. DERTHICK. That is right.

Senator HILL. All right. Suppose you address yourself now to the next item, sir.

TITLE III FUNDS

Dr. DERTHICK. The next one is the title III which has to do with science, and foreign languages, and the request there for grants to the States is \$52.8 million against an authorization of \$61.6 million.

Then there is the feature for the loans to nonprofit private schools for which we are asking \$7.2 million against an authorization of \$8.4 million.

Senator HILL. In other words, you are not too far short of the authorization on this title?

Dr. DERTHICK. No, sir. I wonder if you have any questions on that point. We think we are moving along pretty well on that.

Senator HILL. Your science, mathematics, and foreign language?

Dr. DERTHICK. That is right.

BRIDGES LIMITATION CLAUSE

Senator HILL. You may want to think about this a little bit, but Senator Bridges of New Hampshire proposed a limitation on these funds in an amendment that he offered that none of these funds should go to purchase any equipment that originated in a Communist country or Communist-dominated country. Do you want to testify on that now, or would you rather come back after you have had an opportunity to give that some thought? I don't know whether you have had an opportunity to give that some thought.

Dr. DERTHICK. We find that as far as we are concerned under the law, the Office of Education, we don't have any authority to restrict the States. It would be an intrusion for which we do not have authority. I believe there is other legislation that would permit the President by Executive order, if he thought this was inconsistent with the interests of our country, to restrict that trade.

Is there some other comment which at this time can be made on that?

Mr. HUGHES. I think the Secretary has actually responded to a letter from Senator Saltonstall, I believe, Senator, that goes to this very same point, so one reply has come forward from the Department to the Senate and we anticipate that we will also make a report to this committee at your request.

Senator HILL. We would like to have a full report on this matter.

Mr. HUGHES. Yes, sir.

LOCAL AND STATE RESPONSIBILITIES

Senator HILL. These funds, of course, all have to be matched dollar for dollar by State funds and so far as the act is concerned, as you say, when these funds are matched by the State funds, then the States have the control over the expenditure of the funds; isn't that correct?

Dr. DERTHICK. That is true.

Senator HILL. Certainly the clear intent and purpose of the act was not for Washington to tell the States how these funds should be expended other than to meet the purpose of purchasing this equipment, isn't that right?

Dr. DERTHICK. That is true.

Mr. HUGHES. Administratively it would become a very difficult and tedious thing to assure that any funds that were spent under this program which could be State, local or Federal funds, were not used for this purpose, and it would become, if we had to do it, a very tedious and perhaps offensive administrative requirement.

PREPARED STATEMENT

Senator HILL. Suppose you prepare a memorandum for us on this and it will go in the record. Will you please do that?

Dr. DERTHICK. We will be glad to.

Senator HILL. Make it full and complete.

(The information referred to follows:)

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, May 22, 1959.

Hon. LISTER HILL,
U.S. Senate,
Washington, D.C.

DEAR SENATOR HILL: I have your letter of May 4, 1959, with which you enclosed a portion of the Congressional Record for April 28, 1959, covering a discussion of a proposed amendment to the second supplemental appropriation bill, 1959 (H.R. 5916), which would limit the appropriation in the bill, under the heading "Office of Education, defense educational activities," for grants to States and loans to nonprofit private schools for science, mathematics, and modern foreign language teaching facilities. The proposed amendment would preclude the use of this appropriation for the purchase of science, mathematics and modern foreign teaching facilities which are sold, manufactured, or otherwise identified as originating in Communist or Communist-dominated countries.

The discussion in the Congressional Record indicates a concern on the part of certain Senators that the importation of materials, and purchase of these by our schools would raise problems of economic peril to American manufacturers and could have adverse propaganda effects on American students. Apparently this concern stems from public announcements concerning one importer who is reported to have ordered from Soviet Russia some \$1 million worth of 24 different scientific equipment items.

We do not believe that the proposed amendment to this Federal appropriation under title III of the National Defense Education Act would provide a proper or effective solution to either of the assumed consequences mentioned above. If foreign policy or economic considerations should indicate the desirability of any such restrictions as those which would be imposed by this amendment—and we understand that the Departments of State and Commerce are advising you separately to the effect that they do not—such restrictions should be imposed generally and not limited to purchases made with funds appropriated for educational purposes under the National Defense Education Act.

The purpose of the National Defense Education Act is to promote the national defense and security through strengthening certain key aspects of education in this country. This purpose is subserved in part through title III of the act which authorizes grants to States and loans to nonprofit private schools to help them acquire the equipment and materials they need to expand and improve their instruction in the sciences, mathematics, and modern foreign languages. The proposed amendment would impose upon the local school districts and nonprofit schools purchasing such materials and equipment with the aid of Federal funds, restrictions which are in no way promotive of the accomplishment of the underlying purpose of the National Defense Education Act and which do not apply generally to such purchases when made by other users of such equipment and materials. Such a restriction would, we believe, obviously discriminate against local public school districts and private nonprofit schools which participate in the Federal program authorized under title III of the act. Participating school systems and schools should be free to purchase materials and equipment available in the open market on the same terms and conditions as they may be purchased by others.

The proposed amendment would constitute an unwarranted exercise of Federal control over education and educational processes in this country. We, in the Department, are dedicated to the proposition that Federal assistance for educational purposes should be afforded with only such minimum Federal requirements as are needed to assure that the Federal objective in affording the assistance will be reasonably subserved. It is, we think, patently unsound to use programs of Federal assistance to States, local public agencies, nonprofit institutions, and others as a vehicle for the accomplishment of objectives unrelated to the basic purposes of the programs of Federal assistance.

The Commissioner of Education and I would urge your committee to exclude any such proposed limitation from appropriation bills for this Department. We wish to reassure you of our concern for retaining the integrity and spirit of the National Defense Education Act and its provisions for State and local control of education.

I trust that this response to your inquiry will be satisfactory. Please let us know if we can be of further service.

Sincerely yours,

ARTHUR S. FLEMMING, *Secretary*.

GOODS FROM COMMUNIST COUNTRIES

Senator HILL. Senator Monroney?

Senator MONRONEY. It would be helpful to have the prices of some of these competitive things that are being offered from the Communist areas, if you can. As I understand, they are dumping sales really for propaganda purposes. Communist countries have mass produced these items on a subsidized basis and they are using it as a propaganda weapon in many of the underdeveloped areas. Since they have supplies they are making them available even to undercut the equipment that is being made in the free world.

Dr. DERTHICK. I think we can give some examples of that, can we not, Dr. Ludington?

Mr. LUDINGTON. To my knowledge sales have been limited to a relatively small volume. We have reports that something like a million dollars worth of this equipment has been ordered by an importing firm. This equipment is not yet ready for distribution in the United States.

GRANTS TO STATES FOR SUPERVISION

Dr. DERTHICK. Mr. Chairman, we do have another provision here in title III about which you made comment, that is, grants to the States for supervision of this title.

Senator HILL. Yes.

Dr. DERTHICK. The full authorization is \$5 million and we have made request for \$4 million, which is an increase of \$2,650,000 over the appropriation for 1959, and we think that this will be adequate for the purpose.

Senator HILL. In other words, the program will take a little time to get going fully.

Dr. DERTHICK. Yes, sir.

Senator HILL. And you think the \$4 million will be sufficient?

Dr. DERTHICK. We do. That is an increase of \$2,650,000 for 1959 and we do think that will be sufficient.

Senator HILL. You have the same assurance on that item that you have on the others; if it is not sufficient you can definitely come back for a supplemental.

Dr. DERTHICK. Yes, sir.

TITLE IV FUNDS FOR FELLOWSHIP

As to the title IV on national defense fellowships, we knew exactly what it would take there and we asked for the full amount required. Indicative of the speed with which these titles have been implemented, I remember when we were before the House subcommittee, the joint

subcommittee interested in this legislation, making a report last October, we were asked how long it would take us when we got the money to award these fellowships and Dean Elder, who was in charge of that title responded, "15 minutes." It has been a remarkable undertaking and excellent response for the institutions. We have had a strong advisory committee guiding us and, of course, 150 fellowships have already been awarded, but we have 850 ready to go the minute we have the money, and that is momentarily, as you know. Would there be any questions on that title?

Thirteen million four hundred and fifty thousand dollars will provide for the 1,500 fellowships authorized in 1960, and second-year costs of 1,000 fellowships awarded in 1959. This is expressed in terms of fellowships and not in terms of money, but this is the cost.

Senator HILL. I recall that feature.

TITLE V, GUIDANCE, COUNSELING, AND TESTING

Dr. DERTHICK. In title V, guidance, counseling, and testing, we have asked for the full amount there for the grants to the States.

Senator HILL. The full \$15 million?

Dr. DERTHICK. Yes, sir. For the institutes for counseling, against the full authorization of \$7.2 million, we have asked for \$5 million, because we think that that is about what we can use wisely in 1960. That is quite an increase over 1959.

Senator HILL. That is for institutes for training in counseling?

Dr. DERTHICK. Yes, sir; for training the teachers in this field. That is \$2 million more money than we had in 1959. These institutions got tooled up and we think that is a pretty good advance.

Senator HILL. In other words, you think that will cause the program to move forward as expeditiously as you might reasonably expect?

Dr. DERTHICK. That is right. I might call on Dr. Babbidge, who is in charge of that whole program in higher education, to make a comment.

Dr. BABBIDGE. I would simply say that the Commissioner stated the case precisely. We feel from a professional point of view, in order to maintain a consistent level of quality and move ahead as fast as possible, that this is an appropriate figure.

Senator HILL. To maintain this level of quality you think these funds will be adequate to do the job?

Dr. BABBIDGE. Yes, indeed.

TITLE VI, FOREIGN LANGUAGE

Dr. DERTHICK. Title VI has to do with foreign languages. There are three features, as you well know—the training centers, the institutes for language teachers, and the research. For the centers we are asking for \$3,050,000, and I would like you to consider part C, in connection with that because there is an \$8 million authorization for centers and research, and we are asking for \$7,050,000, which is moving mighty fast toward the top authorization. In the institutes for language teachers we are asking for \$3 million against an authorization of \$7,250,000.

I would like Dr. Babbidge to comment there because we haven't reached quite as far as fast in this area as we have in the other two aspects of the bill, the research and the centers, but there is a good reason for it.

ACTIVITY UNDER REQUESTED 1960 FUNDS

Dr. BABBIDGE. The 1960 request, Mr. Chairman, would make possible a doubling, in effect, of our activity in the institute field. You will recall that the language of the statute as it applies to language institutes places upon us a responsibility to emphasize new approaches, new techniques, in the teaching of modern foreign languages. The number of college and university people trained to train teachers in these new techniques is limited. We feel that we have in a sense to build a base of qualified personnel in the conduct of institutes before we can go at it full speed—in the actual operation of the institutes. You will recall that when the National Science Foundation began their institute program they devoted their first summer simply to the training of staff for institutes. We haven't had time to pause that long, but we are doing very much the same thing.

Senator HILL. You feel, though, that these funds will make it possible for you to proceed as rapidly as you can on a sound basis?

Dr. BABBIDGE. We do.

ATTENTION TO SPECIAL AREAS

Senator MONRONEY. I have been having some correspondence with the Office of Education and they have been very cooperative, but the point I would like to ask the doctor is, Is it your intention to give some special attention to areas where the desire for education in languages is present, but that the teaching faculty or the high school teachers in our secondary schools, and college teachers are not able to acquire the modern techniques to do the kind of a job that needs to be done? I think that in these areas where we have very few foreign language speaking people we definitely need some attention there to plant the seed so that we can correct the very great deficiency that we have in the teaching staffs of such States as Oklahoma.

Dr. DERTHICK. I well remember the correspondence we have had.

Dr. BABBIDGE. I think the Senator put very forcefully the facts underlying the situation in the State of Oklahoma and made quite an impression on all of us.

The law requires us to give particular emphasis to new techniques, but not exclusive emphasis. Our feeling is that we must make priority decisions here. We have a limited staff of our own. We have had this year a limited period of time in which to commence the conduct of institutes. We are trying to identify areas in which there is both a need for and some, if you will, thirst for improved instruction in modern foreign languages.

We are going about this I think at a good pace. We have neglected modern foreign languages in this country for so many years that I don't anticipate that we can remedy all the ills in 1 fiscal year or in 4 fiscal years, for that matter, but I think with the steady accelerated pace of this program and with an emphasis on continuing quality and a primary emphasis on new techniques, though not an exclusive one, we will with the sum requested here be making impressive and sound progress toward the goals contemplated.

ATTITUDE OF INSTITUTIONS

Senator HILL. Would we find some of our heads of institutions disagreeing with you? Do you feel that maybe they can be done a little more rapidly?

Dr. BABBIDGE. We have had over 200 institutions register with us their desire to be considered for contracts in connection with this program and I think that virtually all of those institutions feel that they have a part to play in this program and I suspect before we are through a great majority of them will have taken part in it.

Again I must say that our desire is to proceed as rapidly as possible, keeping in mind certain limitations that exist in the field of trained personnel in this area, the fact that no program can grow too rapidly without serious growing pains. We have endeavored to lay out for the Commissioner and through him for the Congress a planned program of growth in this area that we think will be the most effective overall approach to the problem.

Dr. DERTHICK. I think, Mr. Chairman, at the end of the 4-year period the language authorities in this country will be much better pleased to have maybe some of these institutions come in the second year than the first and the third year than the second. As Dr. Babbidge says, most of them will be in before it is over, to get it on a really sound basis, and I remind you of the excellent leadership that we have. We have topnotch language people in the country helping us.

Senator MONRONEY. I just hope, though, that some attention will be given to the great areas where a dearth of language instructors exists. Any technique is better than no technique and we have a long way to go in these areas where there is an interest in languages, but no one whose ears are tuned to pronunciation or usage of them are available for literally hundreds of our high schools.

Dr. DERTHICK. We did, as Dr. Babbidge has said, give great attention to your point of view. We were impressed by it. We really were, and our whole staff worked over it and we think it has a great deal of merit.

Senator MONRONEY. In other words, we would rather not be on the third round, because we have to grow as well as improve our techniques.

SHORTAGE OF QUALIFIED TEACHERS

Dr. BABBIDGE. Yes, but there is, I would say again, Senator, a serious shortage of well qualified people in the modern language field, not just in terms of new techniques, but basic professional competence so much so that I understand that our own staff in modern foreign languages has been endeavoring to lure from the university of Oklahoma some of the very qualified personnel needed there. It is that limited. We need them and they need them at the university. We are just afraid if we go ahead too fast every qualified language person in the country is going to be either working for us, running the institutes, or enrolled in the institutes, and there will be no one left to teach in the schools.

Senator HILL. We have two others, educational media research and grants to States for educational programs.

TITLE X, STATISTICAL SERVICES

Dr. DERTHICK. And then title X.

Senator HILL. Yes, for your statistical services.

Dr. DERTHICK. We think in all these cases we have asked for the amount of money that we can use.

Senator HILL. We will have your statement here and it may be that we will have to ask you to come back to ask you some questions.

Dr. DERTHICK. We will be very glad to come back.

Senator HILL. That is very fine of you. We certainly appreciate it. You are always so fine and so cooperative it is a great pleasure to have you here, sir.

Dr. DERTHICK. It isn't hard to be with your committee, Senator Hill.

Senator HILL. Thank you. We certainly appreciate your being here this morning.

The committee will stand in recess until 2 o'clock this afternoon.

(Whereupon, at 12:30 p.m. the committee was recessed to reconvene at 2 p.m. the same day.)

AFTERNOON SESSION (MONDAY, MAY 4, 1959)

OFFICE OF EDUCATION

STATEMENT OF DR. L. G. DERTHICK, COMMISSIONER OF EDUCATION; ACCOMPANIED BY JOHN F. HUGHES, EXECUTIVE OFFICER; JAMES H. PEARSON, ASSISTANT COMMISSIONER FOR VOCATIONAL EDUCATION; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER—Resumed

AMOUNT REQUESTED

Senator HILL. The committee will kindly come to order.

Doctor, when we had the recess we had come to educational media.

Dr. DERTHICK. What we have done there, Senator Hill, is to ask for \$3 million for 1960.

Senator HILL. The authorization was \$5 million?

Dr. DERTHICK. But we had a million and a half dollars in 1959.

Dr. Hall and his staff in consultation with us felt that was a fair degree of progress to make in this second year. We are doubling the amount of money, you see.

Senator HILL. You did not really have a full year with the \$1½ million, did you?

Dr. DERTHICK. That is right. We did not, but they feel that that is a reasonable amount for 1960.

Senator HILL. Do you find a good lot of interest in this?

Dr. DERTHICK. Yes, sir. We do and we think much good is going to come out of the program. As you know, we have a very excellent advisory committee.

Senator HILL. You know that. You are really getting started with it now, are you?

Dr. DERTHICK. Yes, sir. As a matter of fact, we have also enlisted a group of research reviewers and they are in the Office today at a meeting. They have been working for weeks on the projects coming before the committee next week.

AUTHORIZATION AND ESTIMATE, TITLE VIII

In the area of vocational programs, title VIII, we have an authorization of \$15 million. In 1959, we had \$3,750,000 and we are asking for \$7 million in 1960.

If Mr. Pearson and his staff could have given us good reasons, we would have asked for more than that but in getting this program going he feels with his staff that amount will be sufficient.

Senator HILL. You feel that that is as much sound progress as can be made this year?

Dr. DERTHICK. That is right, sir.

Mr. Pearson might want to add something to that.

Mr. PEARSON. Yes, Senator Hill. We had \$3,750,000, to be used this half year. It took about a half year to get the program started. When we go to the \$7 million, we feel that amount will be sufficient to take care of the needs next year and give us a good wholesome growth, because out of the money this year a great deal of equipment will be bought in preparation for this year and next year.

We feel that \$7 million is a reasonable amount for next year.

Senator HILL. In other words, a much larger percent of this year's appropriation will go for equipment than next year's?

Mr. PEARSON. That is the way we feel, Senator, yes.

Senator HILL. Do you think you are making definite progress?

PAYMENTS TO STATES

Mr. PEARSON. Yes, sir. I just checked this morning. We have 48 States that have submitted State plans. We have made payments to 47 States. We will make payment to the 48th State within a few days so that we feel very outstanding progress has been made this year on the program.

Dr. DERTHICK. We think it is rather remarkable to have 48 States at this time.

Senator HILL. They are all in the program at this time?

Dr. DERTHICK. Yes, sir.

ACTIVITY OF VOCATIONAL EDUCATION GROUP

Senator HILL. These vocational education people are pretty well on the ball, as you and I know.

Dr. DERTHICK. That is right.

Senator HILL. That went into the bill when some folks did not want it in there. I only say that because that shows that you deal with the vocational education people and you will find that they are a dynamic group.

Dr. DERTHICK. That is right. I think that some folks did a very good job of selling that idea because this technical training introduces a whole new sphere in vocational education.

I think it is tremendously significant and is opening up a new day.

Senator HILL. I am gratified to hear you say that, Doctor.

We are certainly in a technical age.

Dr. DERTHICK. Yes, sir.

TECHNOLOGICAL PROGRESS

Senator Hill, just as one example of many examples of what has been done to reflect progress is that in one of the States they called in

all of the electronic industry representatives for that one State and found out that they were going to need 4,000 people for 4,000 jobs in the next 4 years in that field.

Senator HILL. Just in that one State?

Dr. DERTHICK. Yes; in the electronics field.

This new program is going to train young people and they are going to be operating at a higher level than skilled craftsmen on this technical level, so that that is just one reason why I think it is a new day.

Senator HILL. I am certainly glad to hear you say that, Doctor. It is very gratifying.

TITLE X, IMPROVING MACHINERY

Dr. DERTHICK. In title X we asked for \$1,500,000 for 1960, and our people who are close to this feel that that will do the job.

Senator HILL. Refresh my recollection on that.

Dr. DERTHICK. That is an improving of machinery for State and local educational statistics.

Senator HILL. What is the amount of the authorization?

AUTHORIZATION

Dr. DERTHICK. It is up to a maximum of \$50,000 for each State. It is written in those terms as to maximum authorization so that the maximum amount that we would ever use is what, Mr. Hughes?

Mr. HUGHES. That would be about \$2.6 million, sir.

Senator HILL. That would be the maximum amount that you would ever expect to use?

Mr. HUGHES. That could be spent, that is right.

ESTIMATE, 1960

Senator HILL. You are asking for \$1.5 million this year?

Dr. DERTHICK. Yes, sir.

Senator HILL. I remember that you felt that this was very important.

Dr. DERTHICK. I think it may well be one of the most lasting, significant parts of the whole National Defense Education Act.

Senator HILL. It will keep us up to date, will it not?

Dr. DERTHICK. Yes, sir; it certainly will, and we are pretty well satisfied with the way it is getting underway.

COOPERATION UNDER DEFENSE EDUCATION ACT

Now, Senator Hill, as I said at the outset, this National Defense Education Act, we feel, is going exceedingly well. We have had excellent cooperation and we are moving just as fast as we could reasonably expect to move. The people with whom we work think that. That is encouraging to us.

Senator HILL. In other words, those with whom you are working feel that you are moving right along as expeditiously as you can and have a sound program?

Dr. DERTHICK. That is right. We are very much encouraged.

Our people, as I said at the outset, have worked extremely hard but it is all very rewarding to feel that the people we are trying to serve are pleased.

Senator HILL. It moves us into a good many fields where you have not been before, does it not?

Dr. DERTHICK. Yes, sir. It certainly does, and I think that while, of course, education has many needs and this by no means touches all the needs, it does cut across a great many needs to stimulate improvement and it is my experience in the history of education that whenever you move ahead in particular areas, then it opens up the way for other areas to rise, too. Education does not advance on an even front.

We feel very pleased about it and I want to say that from September 2d on down in the Office of Education we recalled your name and the names of other men who had been outstanding leaders in getting this legislation and we felt not only a professional obligation but we felt a personal obligation to make good on your expectations.

Senator HILL. Under the inspiration of our leadership, Doctor, you certainly went to work and did this job.

I want to thank you and express my appreciation for the fine way you have done it. I greatly appreciate it.

Dr. DERTHICK. Thank you, sir; very much. I will tell my staff, who are responsible.

PREPARED STATEMENT

Senator HILL. Senators Humphrey and McCarthy have requested that their joint statement supporting a request for appropriation of additional funds for the student loan program be included in the testimony on this program. Their statement will be included at this point in the record.

(The statement referred to follows:)

STATEMENT OF SENATOR HUBERT H. HUMPHREY AND SENATOR EUGENE MCCARTHY IN SUPPORT OF INCREASED APPROPRIATIONS FOR STUDENT LOAN FUND

Mr. Chairman, last year Senator Humphrey joined you and other Senators in introducing what is now known as the National Defense Education Act. As the committee members know, the purpose of this act is to provide a 6-year program to strengthen American education at all levels, with emphasis on science, mathematics, engineering, technology, and modern foreign languages. This program has been graciously accepted by our educators and students. It has supplied a bold and dramatic answer to the President's timid proposals in the field of Federal aid to education and has given impetus to efforts to erase our educational deficits.

We would like to call particular attention to the national defense student loan program which, in our opinion, suffered most as a result of inadequate appropriations. We are sure the committee is well aware of the growing number of Senators, including ourselves, and other spokesmen who conservatively describe the initial outlay of funds for this program as pitifully inadequate.

The \$6 million appropriated for student loans for more than 1,000 colleges and universities will provide loans for only 10 percent of the student applications, which total \$62 million, according to the Office of Education. As a result, a supplemental appropriation of \$25 million has been requested to continue student loans in the current fiscal year.

The fiscal 1960 budget estimate is for \$30 million for student loans. This amount is just a little more than the supplemental and is wholly inadequate.

We respectfully submit that the committee should fully implement the student loan provisions of the act and should appropriate a minimum of \$40 million for student loans. And we regretfully submit that even this figure will be inadequate.

Now that we have established this program, we have no alternative but to live up to its provisions.

Earlier we said that during the current fiscal year most colleges received student loan allocations amounting to about one-tenth of their requests. The State of Minnesota received only about 8 percent of the funds needed to meet institutional requests.

Mr. Chairman, the student loan program is just one facet of the National Defense Education Act. All of the act's provisions are equally important. Therefore, we sincerely urge this committee to make full, adequate appropriations for each provision.

EXPANSION OF TEACHING IN EDUCATION OF THE MENTALLY RETARDED

APPROPRIATION ESTIMATE

"For grants to public or other nonprofit institutions of higher learning and to State educational agencies, pursuant to the Act of September 6, 1958, 72 Stat. 1777, \$1,000,000."

Amounts available for obligation

Description	1959 appropriations	1960 budget estimate	1960 House allowance
Appropriation or estimate.....		\$1, 000, 000	\$1, 000, 000

Obligations by activity

Description	1959 appropriations	1960 budget estimate	1960 House allowance
Grants to institutions of higher education.....		\$686, 400	\$686, 400
Grants to States.....		313, 600	313, 600
Total obligations.....		1, 000, 000	1, 000, 000

Obligations by objects

Object classification	1959 appropriations	1960 budget to Congress	1960 House allowance
11 Grants, subsidies and contributions (total obligations)....		\$1, 000, 000	\$1, 000, 000

GENERAL STATEMENT

Dr. DERTHICK. Senator Hill, if you would permit us, we would like to read a statement about the Expansion of Teaching in the Education of Mentally Retarded. That is something new.

Senator HILL. That is legislation we just passed.

Dr. DERTHICK. We are asking for the first money to implement it. If I may, I would like to read it.

AMOUNT REQUESTED

An amount of \$1 million is requested to implement Public Law 85-926, which is designed "to encourage expansion of teaching in the education of mentally retarded children through grants to institutions of higher learning and to State educational agencies." Since the act was passed in the closing days of the 85th Congress, it was not

accompanied by an appropriation for implementation in fiscal year 1959.

PURPOSE OF PROGRAM

The ultimate purpose of the program as set forth in the legislation is to aid the State and local school systems in providing education for mentally retarded children and youth throughout the Nation. The method is to provide professional training for leaders in programs of education for the mentally retarded. One aspect is the recruitment and preparation of persons to direct programs in colleges and universities and to direct and supervise teachers in State and local school systems; another is the strengthening of the resources of existing college programs to produce college teachers and probably the establishment of a few new programs.

Of course, the bottleneck is that we do not have leadership and are trying to train the leadership, as you well know.

Senator HILL. That is the purpose of the legislation?

Dr. DERTHICK. That is right.

There are approximately 1 million mentally retarded children in the Nation; of this number not more than one-fourth are receiving suitable education. The single greatest barrier to the expansion of educational services is the lack of qualified teaching personnel. That is the training of leaders in State departments who will lead the teachers.

Senator HILL. There has been so little leadership in this field.

Dr. DERTHICK. Exactly, and we do not have the training facilities.

It is believed that this program is the most effective type of contribution that the Federal Government could make as State and local school systems attempt increasingly to provide for the mentally retarded.

ACTIVITY UNDER PROGRAM

It is estimated that the \$1 million would be used to provide, in the first place, about 100 1-year traineeships at some 20 institutions of higher learning plus an average of two 1-year traineeships in each State.

Senator HILL. You mean about what number?

Dr. DERTHICK. About 200 leaders trained and, of course, we would look to them to train the teachers.

Senator HILL. Surely.

Dr. DERTHICK. Along with the funds requested to support the trainees receiving awards from the Commissioner of Education—under section 1 of the act—or from State educational agencies—under section 2 of the act—the institutional costs of expanding training programs will be provided at an average cost of about \$2,000 per trainee. In other words, we not only pay the people to go to these institutions to get the training but, in view of the shortage of facilities, we want to provide a \$2,000 allowance to the institutions to build up their resources so they can handle these people.

Senator HILL. You have to do that to handle the people.

Dr. DERTHICK. That is right; we have to do that.

LEGAL ISSUE

Subsequent to the hearings before the House Appropriations Committee, when regulations were being drafted to implement Public Law 85-926, a legal issue was raised, and I want to call your special attention to this, concerning the authority to pay institutional costs of training for traineeships granted by State departments of education. In other words, we are advised that we clearly have the authority to pay the institutions the grant to help them to train these people that come to them by other means, but our counsel advises us that we do not clearly have the authority to give the same allowance to the institutions to help them tool up to train the people that are coming from the State departments. Our purpose is the same, and we have the authority clearly to help with the other trainees, but those that come from the State departments would be second-class citizens in terms of the institutions, and we are worried about that because the institutions will not have aid to provide facilities and they may not be as interested in that group.

ASSUMPTION ON TRAINING COSTS

Senator HILL. It is most important that that be cleared up.

Dr. DERTHICK. Here is what we are suggesting: The President's budget was submitted on the assumption that such institutional costs were intended, and they were justified in our presentation to the Congress. It would be inconsistent and inappropriate to expect that such costs would be defrayed for traineeships granted under section 1 of the act, and not for those under section 2 of the act.

I wish to call this matter to your attention, and we will be pleased to suggest clarifying language for inclusion in the pending bill, if the committee so desires, so that it would give us clear authority.

Senator HILL. We would be happy to have that language.

I am familiar with this legislation and certainly the intent was just as you have stated.

Dr. DERTHICK. Yes, sir. So we would like to do that through your staff, if we may.

Senator HILL. That will be fine, Doctor. We would appreciate it.

Dr. DERTHICK. Thank you. That clears that point on the Public Law 85-926.

PREPARED STATEMENT

(The following statement was later furnished to the committee:)

Page 19, line 8, insert before the period the following: "*Provided*, That section 2 of such Act is hereby amended by adding at the end thereof: 'Such grants shall also be available to assist such institutions in meeting the costs of training for such fellows and trainees'".

Section 1 of Public Law 85-926 provides for grants to public or other nonprofit institutions of higher learning for fellowships and traineeships including costs of conducting the training.

Section 2 provides for grants to State educational agencies to assist them in establishing and maintaining fellowships or traineeships directly or through grants to public or other nonprofit institutions of higher learning.

This amendment is requested to clarify the legal issue raised concerning the authority to pay institutional costs of training for traineeships granted by State departments of education.

It would be inconsistent and inappropriate to expect that such costs would be defrayed for traineeships granted under section 1 of the act, and not for those under section 2 of the act.

SALARIES AND EXPENSES, OFFICE OF EDUCATION

APPROPRIATION ESTIMATE

“For expenses necessary for the Office of Education, including surveys, studies, investigations, and reports regarding libraries; coordination of library service on the national level with other forms of adult education; development of library service throughout the country; purchase, distribution, and exchange of educational documents, motion-picture films, and lantern slides; and cooperative research, surveys, and demonstrations in education as authorized by the Act of July 26, 1954 (20 U.S.C. 331-332) ; **[\$7,850,000]** *\$12,800,000*, of which not less than \$550,000 shall be available for the Division of Vocational Education as authorized.”

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Actual appropriation.....	\$8, 786, 500	\$12, 800, 000	\$12, 800, 000
Supplemental appropriation.....	841, 000		
1959 appropriation available in 1958.....	-16, 444		
Total.....	9, 611, 056	12, 800, 000	12, 800, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Statistics and research:						
(a) Services.....	126	\$1, 128, 485	142	\$1, 432, 580	142	\$1, 432, 580
(b) Cooperative agreements.....		2, 700, 000		3, 200, 000		3, 200, 000
Administration of school assistance in federally affected areas.....	140	1, 175, 675	157	1, 337, 600	157	1, 337, 600
Vocational education.....	86	752, 810	86	838, 200	86	838, 200
Higher education.....	168	1, 004, 330	176	1, 681, 700	176	1, 681, 700
International education.....	30	306, 050	30	314, 850	30	314, 850
State and local school systems.....	238	1, 615, 965	266	2, 642, 670	266	2, 642, 670
Program direction and services.....	143	944, 185	165	1, 352, 400	165	1, 352, 400
1959 program obligated in 1958.....		-16, 444				
Total obligations.....	931	9, 611, 056	1, 022	12, 800, 000	1, 022	12, 800, 000

Obligations by objects

Object classification	1959 appro- priations	1960 budget to Congress	1960 House allowance
SUMMARY OF PERSONAL SERVICES			
Total number of permanent positions.....	931	1,022	1,022
Full-time equivalent of all other positions.....	7	11	11
Average number of all employees.....	727	994	994
Number of employees at end of year.....	931	1,022	1,022
01 Personal services:			
Permanent positions.....	\$5,186,460	\$7,264,563	\$7,264,563
Positions other than permanent.....	56,550	77,280	77,280
Other personal services.....	36,400	68,368	68,368
Total personal services.....	5,279,410	7,410,211	7,410,211
02 Travel.....	449,150	705,575	705,575
03 Transportation of things.....	11,695	7,345	7,345
04 Communication services.....	97,195	142,600	142,600
05 Rents and utility services.....	5,000		
06 Printing and reproduction.....	365,890	442,995	442,995
07 Other contractual services.....	156,735	298,511	298,511
Cooperative research agreements.....	2,700,000	3,200,000	3,200,000
08 Supplies and materials.....	49,775	68,310	68,310
09 Equipment.....	180,905	61,905	61,905
11 Grants, subsidies, and contributions.....	326,185	456,158	456,158
15 Taxes and assessments.....	5,560	6,390	6,390
1959 program obligated in 1958.....	-16,444		
Total obligations.....	9,611,056	12,800,000	12,800,000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	803	\$8,786,500
1959 supplemental appropriation.....	128	841,000
Total appropriation.....	931	9,627,500
Deduct nonrecurring costs.....		-174,775
Revised 1959 base.....	931	9,452,725
1960 appropriation request.....		12,800,000
Net change requested.....		3,347,275

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases:				
For mandatory items:				
Annualization of 64 new positions in service areas authorized in 1959 for part of year: 150 new positions authorized in 1959, and 128 new positions authorized in the supplemental estimate, for administration of the National Defense Education Act.....		\$1,756,807		\$1,756,807
Extra day's pay (260 days in 1959 and 261 days in 1960).....		26,880		26,880
Subtotal.....		1,783,687		1,783,687
For program items:				
For expanded services in areas of research planning, and educational statistics, and initiating program of captioned films for the deaf including \$50,000 for purchase, distribution, and captioning of films and \$45,500 for machine tabulation of statistical data.....	12	220,684	12	220,684
For necessary services in area of new educational media.....	4	41,070	4	41,070
For cooperative research agreements.....		500,000		500,000
For expanded services necessary to administer the amended and extended school assistance program.....	17	157,885	17	157,885
For expanded services in area of higher education programs and administration of the National Defense Education Act.....	8	123,226	8	123,226
For expanded services in area of international education.....		10,471		10,471
For initiation of two new programs authorized by the 85th Cong., namely science clubs, and administration of grant program for expansion of teaching in area of mentally retarded and to provide a specialist for visiting teacher service.....	9	106,627	9	106,627
For expanded services in administration of the National Defense Education Act in the areas of science, mathematics, and foreign language instruction; guidance, counseling, and testing; and statistical services.....	19	211,575	19	211,575
For completion of staffing of regional officers.....	9	80,890	9	80,890
For program direction and administration to provide necessary services on behalf of the expanded service and research areas of the Office and additional requirements due to administration of the National Defense Education Act.....	13	111,160	13	111,160
Total change requested.....	91	3,347,275	91	3,347,275

New positions requested

	Grade	Annual salary
Statistics and research:		
Director, Research Planning.....	GS-15.....	\$12, 771
Coordinator, Research Planning.....	GS-14.....	11, 357
Specialist, captioned films.....	GS-14.....	11, 357
Research coordinator.....	GS-13.....	9, 901
Statistician.....	GS-13.....	9, 901
Specialist, new educational media (2).....	GS-13.....	19, 802
Statistician.....	GS-12.....	8, 341
Do.....	GS-11.....	7, 030
Administrative assistant.....	GS-7.....	4, 992
Secretary.....	GS-6.....	4, 493
Statistical clerk.....	GS-5.....	4, 056
Secretary (3).....	GS-5.....	12, 168
Secretary.....	GS-4.....	3, 765
Subtotal (16 positions).....		119, 934
School assistance in federally affected areas:		
Field representative.....	GS-13.....	9, 901
Associate program adviser (2).....	GS-12.....	16, 682
Associate field representative (6).....	GS-12.....	50, 046
Administrative assistant.....	GS-7.....	4, 992
Secretary (3).....	GS-5.....	12, 168
Secretary (4).....	GS-4.....	15, 060
Subtotal (17 positions).....		108, 849
Higher education:		
Education adviser, graduate fellowship.....	GS-14.....	11, 357
Education adviser, language development.....	GS-14.....	11, 357
Education adviser, student loans.....	GS-14.....	11, 357
Education adviser, graduate fellowship.....	GS-13.....	9, 901
Research adviser, language development.....	GS-13.....	9, 901
Administrative assistant, student loans.....	GS-11.....	7, 030
Secretary (2).....	GS-5.....	8, 112
Subtotal (8 positions).....		69, 015
State and local school systems:		
Assistant chief, science, mathematics, and foreign languages.....	GS-14.....	11, 357
Assistant chief, guidance, counseling, and testing.....	GS-14.....	11, 357
Specialist, teaching of the mentally retarded.....	GS-14.....	11, 357
Specialist, science clubs.....	GS-14.....	11, 357
Specialist, visiting teacher service.....	GS-14.....	11, 357
Specialist, teaching of the mentally retarded.....	GS-13.....	9, 901
Specialist, program analyst.....	GS-13.....	9, 901
Specialist, school administration.....	GS-13.....	9, 901
Specialist, science (2).....	GS-13.....	19, 802
Specialist, mathematics (2).....	GS-13.....	19, 802
Specialist, foreign languages (2).....	GS-13.....	19, 802
Specialist, program organization (2).....	GS-13.....	19, 802
Specialist, loans to schools.....	GS-13.....	9, 901
Specialist, educational records and reports.....	GS-12.....	8, 341
Program analyst (2).....	GS-11.....	14, 060
Research assistant.....	GS-9.....	5, 990
Secretary.....	GS-6.....	4, 493
Secretary (2).....	GS-5.....	8, 112
Secretary.....	GS-4.....	3, 765
Clerk-typist (3).....	GS-4.....	11, 295
Subtotal (28 positions).....		231, 653
Program direction and management:		
Regional representative (4).....	GS-15.....	51, 084
Program planning officer.....	GS-14.....	11, 357
Senior specialist in laws and legislation.....	GS-14.....	11, 357
Assistant executive officer.....	GS-14.....	11, 357
Budget analyst.....	GS-12.....	8, 341
Training officer.....	GS-12.....	8, 341
Editor.....	GS-12.....	8, 341
Auditor.....	GS-9.....	5, 990
Administrative aid.....	GS-6.....	4, 493
Secretary (2).....	GS-6.....	8, 986
Budget clerk.....	GS-5.....	4, 056
Copy clerk.....	GS-5.....	4, 056
Secretary (6).....	GS-5.....	24, 336
Total (22 positions).....		162, 095
Total, 91 new positions, all activities.....		691, 546

PREPARED STATEMENT

We come now, I believe, to the last item on the agenda of our presentation to you, Mr. Chairman, the "Salaries and expenses" item of the Office of Education.

(The statement referred to follows:)

STATEMENT OF COMMISSIONER OF EDUCATION ON SALARIES AND EXPENSES, OFFICE OF EDUCATION

Mr. Chairman and members of the Committee, the request for "Salaries and expenses" for the fiscal year 1960 is in the amount of \$12,800,000. This amount represents an increase of \$3,172,500 over proposed appropriations for the current year. Primarily this increase results from newly enacted legislation, such as the National Defense Education Act, an act making provision for the captioning of films for the deaf, an act authorizing grants for the expansion of education for mentally retarded children, amendments to Public Laws 815 and 874 providing for school assistance in federally affected areas, and an act requiring the Commissioner to encourage, foster, and assist in the establishment of science clubs for boys and girls. Part of the increase, however, is to provide for a modest expansion in the cooperative research program authorized by Public Law 531, and to make more adequate provision for a few essential services. I shall present brief explanations of the increases requested. We will then be glad to answer any questions.

Statistics and research

(a) *Services*.—The Division of Statistics and Research Services administers four branches, each engaged in separate but related activities designed to contribute effectively to the activities of the overall objectives of the Office of Education and, at the same time, operate in such a manner that maximum efficiency and effectiveness is achieved in each branch. Specifically, the Division of Statistics and Research Services contributes to the achievement of the overall goal in five ways:

(1) By providing more precise up-to-date data about education and the policies and problems which impinge on education.

(2) By fostering research, surveys, and demonstrations dealing with the major problems in educational theory and practice and developing ways of translating the results of these various research efforts into improved educational practice.

(3) Through the assimilation, analysis, and distribution of information about library techniques, management, and financing, the provision of leadership in the field of library development, and the administration of the library grants program.

(4) By fostering research in the methods of utilizing newer media for educational purposes and disseminating the results of the research and its implications for the teaching-learning process to practitioners in the field.

(5) By operating a loan service of captioned films for the deaf.

It is obvious from the very nature of these activities that they are essential to the program of the Office of Education, to the improvement of education generally, and provide the Office of Education with opportunity for leadership through direct contact with State departments, colleges, and universities, library organizations, and research organizations throughout the country.

For the services aspects of this Division, we are requesting an increase of \$223,705 which is necessary to continue the present staff and provide 12 additional positions and other expenses for the following purposes:

Four positions in the Educational Statistics Branch to improve fact gathering on education and provide for needed assistance in the administration of the National Defense Education Act;

Five positions in the Cooperative Research Branch, necessary to the proper functioning of the program, to provide proper analyses of current and needed research and research resources and of the original research problems and areas to provide a basis for redirection of the program, summarize completed research and assist in translating the findings into educational theory, and to provide a program of dissemination;

Three positions to initiate the new program of captioned films for the deaf, authorized by Public Law 85-905.

The increase requested includes \$50,000 for captioning and distributing seven films for the deaf, and \$44,500 for machine tabulation of educational statistics and other data to be collected.

(b) *Cooperative research agreements.*—The Office of Education provides support for research in education through its cooperative research program. This program is operated under Public Law 531, 83d Congress, which authorizes the Commissioner of Education "to enter into contracts or jointly financed cooperative arrangements with universities and colleges and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education." The purpose of this program is to develop new knowledge about major problems in education or to devise new applications of existing knowledge in solving such problems.

Since its beginning, the program has received some 600 applications for the support of various research projects. These have been reviewed by the Office staff and by the Research Advisory Committee which has recommended 181 for support. As of the end of December 1958, a total of 159 projects had been initiated. Among them are 54 dealing with the education of the mentally retarded, 20 having to do with the selection and career development of teachers and school administrators, and 18 concerned with the identification and development of gifted children. The others cover a wide range of educational problems.

To date, 30 projects have been completed. The majority of these deal with the education and training of mentally retarded children—the extent to which they may also be physically retarded, the ways in which they seem to learn best, and their social development. Other significant reports deal with the plans for further education of high school youth and the reasons why many capable students do not continue on to college.

Further plans for strengthening and developing the cooperative research program during the coming year involve four major activities. First, work is already underway to establish national goals for research in education in order to enable the Office to define more clearly its own role with regard to the total national need for educational research. The second activity has also been begun. It consists of a nationwide survey of what is actually being done in research in education at the present time. Such a survey will help identify more clearly the problems on which major research emphasis should be placed, thus enabling the Office to focus its program on answering the most pressing needs.

The third major activity includes an analysis of the findings of research projects already completed and the synthesis of these findings into the development of new theory in education. This will be done through the use of study groups of outstanding specialists in various areas of education and in related disciplines. The new theory will be evaluated through field studies and demonstrations of new educational practice throughout the country. The fourth major activity centers on the dissemination of the research findings and new theory. It includes additional publications, even more reports at professional meetings, seminars for the sharing of information about on-going research, and clinics for the improvement of research methodology.

The sum of \$3.2 million is requested for the support of cooperative research projects during the fiscal year 1960. This includes approximately \$2,500,000 for the continuing support of projects initiated during previous fiscal years and will provide approximately \$700,000 for the initiation of new projects during the next fiscal year.

(c) *Administration of defense educational programs.*—An amount of \$137,500 is being requested (an increase of \$80,390) for administration of the title VII program by the New Educational Media Branch of the Office of Education. This amount provides for a total of 12 positions (8 of which will have been filled in 1959, with 4 positions to be added in fiscal 1960) and for advisory committee and consultant services necessary to carry out the provisions of title VII.

The work to be supported during fiscal year 1960 calls for maintenance of a variety of staff activities related to the processing of applications supporting proposals for research, experimentation, demonstrations, and such followup activities as may be necessary including the negotiation of grants and contracts and the full development of a program of dissemination of information regarding media research and educational practices. As of February 1, 1959, some 200 project applications had been received. Estimates projected for fiscal 1960 indicate that several hundred proposals may be submitted. The additional staff is vital to fulfillment of the responsibilities placed upon the Office by title VII of the act.

School assistance in federally affected areas

Public Laws 815 and 874 provide for Federal assistance to public schools in areas which are affected by Federal activities. The 85th Congress extended and amended these companion laws in order to discharge a continuing Federal responsibility. The estimate for administration of grants for school assistance in federally affected areas in fiscal year 1960 amounts to \$1,337,600, an increase of \$161,925.

The legislation extending and amending these acts made several changes which have substantially increased the workload of the Office in the processing of applications. For fiscal year 1960, it is estimated there will be some 300 construction applications, and an estimated 4,000 current expense applications to be processed for entitlement determinations. In addition, it will be necessary to review and revise, as well as make appropriate payment adjustments for, some 4,200 prior year cases.

In the administration of these programs, there has been a continuous increase in the efficiency of our field and departmental staff. However, it has become clear that the present staff cannot process the increased workload except through the inefficient process of accumulating large backlogs of unprocessed applications and engaging in shortcut processes which do not adequately discharge Federal responsibilities or protect Federal funds. This results in school districts using temporary makeshift facilities, resorting to double sessions to take care of the increases in school population due to activities of the Federal Government, and causing a delay of several months in the computation and subsequent release of maintenance and operation payments for current expenditures.

In the current fiscal year, due to the lack of sufficient staff and the liberalizing amendments to the school assistance laws, we have encountered a greater backlog in unprocessed cases than in any prior fiscal year. In turn, the ensuing volume of correspondence from school districts, State educational agencies, Members of Congress, and interested citizens regarding the status of applications and other aspects of these programs has further delayed processing actions. Accordingly, this appropriation request of \$1,337,600 provides an increase of \$161,925, allows for the addition of 17 new positions, including the necessary increases in travel expenses for the field staff and additional items of expenditures, in order to permit the processing of applications for assistance in this program on a reasonably current basis.

Vocational education

(a) *Services*.—The recommended appropriation for the Division of Vocational Education provides for the continuation of 71 positions and other expenses on the same level as in the current year. No increase is requested.

(b) *Administration of defense educational programs*.—The Division of Vocational Education has been given the responsibility to administer title VIII of the National Defense Education Act, making provision for area vocational education programs. A new branch has been set up within the Division to carry out this assignment.

An appropriation has been requested to continue on a full-year basis 15 positions, professional and clerical, requested in 1959, and the other necessary expenses. An increase of \$85,390 is required for this purpose. The professional workers will be available to assist the States in developing programs for training of highly skilled technicians necessary for the national defense.

Higher education

(a) *Services*.—Higher education is now undergoing a very rapid development in the United States. During the past year, the total enrollment in the colleges and universities increased from 3,068,000 to 3,259,000—somewhat more than 6 percent. The increase in the number of first-time enrolled students was even greater—7 percent. This rapid growth is creating unusually difficult problems relating to staffing the institutions, organizing adequate programs of instruction, providing ample physical facilities, and obtaining sufficient financial support. The shortages in the colleges and universities with respect to these matters are painfully apparent to many competent observers who are expressing grave concern that the higher education demands of the Nation may not be met in these times of great domestic and international strain. It is the responsibility of the Office of Education to gather and analyze reliable information on the extent of needs, capabilities, and plans for meeting the developing situation in higher education. This information helps to lay the foundations for State and Federal

action programs and to guide them in proper directions. Fortunately the higher education activities of the Office have been greatly strengthened during the current year through an increased appropriation. As a result, the Office is now staffed to help with many of the principal problems of education beyond the high school. The 1960 budget includes no additional provisions in higher education, but it does include an increase of \$34,925 to provide for full-year employment of the current staff.

(b) *Administration of defense educational programs.*—Excellent progress has been made in implementing the four higher education titles of the National Defense Education Act despite severe limitations in staff and facilities. This has been accomplished with maximum utilization of the existing organization of the Office and with maximum involvement of leading educators throughout the country in the development of basic policy and procedures. A new Financial Aid Branch has been established within the Division of Higher Education. Key recruitment has been expedited by the employment in certain positions of eminent educators on leave from colleges and universities. Intensive effort was made to consult with representatives of the institutions of higher education, and a series of 10 regional meetings were held throughout the country to explain the objectives and operations of the program to over 4,000 representatives of colleges and universities.

Although great progress has been made in the relatively short time since the act was signed in September in putting into effect the many detailed plans and arrangements essential before Federal funds could be paid out, experience has shown to date that the staffing pattern initially established for these administratively complex titles has been inadequate to meet the workload. Current achievement has been made through unusual industry and extended overtime efforts of the staff. Additional staff is imperative to permit the orderly continuation of the operation which has been instituted and to assure the installation of the necessary fiscal controls and program review procedures essential to the carrying out of responsibility under the law. The administrative workload for fiscal year 1960 not only adds to current operations the expanded work in the review and consultation essential to the grants and contracts awarded in the current year, but the fiscal year 1960 program represents a more than doubling of three of the titles while the administrative details and complexities will greatly increase work involved in all titles. The funds requested in this budget will be essential to continue the efficient operation of this program which has been so well begun.

The request involves an increase of \$642,445 to maintain on a full-year basis staff provided for a part of the year in 1959, and for eight additional positions which are required to effectively administer these higher education programs.

International education

Recent international developments make education a crucial battleground in the cold war. More than four times as many people are being educated today in the U.S.S.R. and Soviet China as in the United States. Communist education creates trained manpower for production, and for Communist enterprises everywhere.

There is an unparalleled upsurge in education around the world, because education today is the foundation both of power and of good living. Western Europe is hurriedly strengthening its education. New countries in Asia and Africa are trying to buy security and comfort for the next generation by heavy investments in education.

Our Division of International Education has acted for nearly a hundred years as eyes and ears for American education. It cooperates with State and other agencies in strengthening American education overseas, and helps friendly governments to solve their educational problems. It works with American educators, on their request, to strengthen international education for Americans. It advises our Secretary and, through him, other high officials regarding American policy in international affairs.

Altogether, demands for the services of this Division have considerably increased in the past year. A net increase of \$8,800 will provide for continuing this program on the same basis as in 1959.

State and local school systems

(a) *Services.*—A total of \$1,279,020 is requested for salaries and expenses to carry out the activity of providing consultation and technical assistance to State and local school systems, conducting research, developing educational materials, and furnishing advisory services to national educational organizations.

The 1960 budget provides for an increase of \$150,455 to support nine new positions, four of which are education specialists, to carry out new responsibilities assigned by law to the Office of Education.

Two of these specialists are needed to begin the implementation of Public Law 85-926 which authorizes grants to institutions of higher learning and State educational agencies to assist in increasing the number and quality of leaders to conduct programs in the education of mentally retarded children.

One of these specialists will be assigned to implement Public Law 85-875 which makes the Commissioner of Education responsible for encouraging, fostering, and assisting in the establishment of science clubs.

The other specialist will be assigned to perform research and provide leadership in the area of services provided through visiting teachers to children who are emotionally or socially maladjusted.

(b) *Administration of defense education programs.*—An amount of \$1,363,650 is requested for salaries and expenses for administration of grant and loan programs under titles III and V of the National Defense Education Act. These programs, which operate in the fields of elementary and secondary education, provide consultation and technical assistance as well as administration of grants and loans for the purpose of: strengthening instruction in science, mathematics, and modern foreign languages; establishing and maintaining guidance, counseling, and testing services; and improving State educational statistical services.

The request represents an increase of \$876,250 over estimated appropriations for fiscal year 1959. This increase would provide for the continuation on a full-year basis of 117 positions requested in 1959, and an additional 19 positions, bringing the total staff for this activity to 136. Nine of the additional positions will be needed to meet State requests for professional assistance in developing stronger programs for science, mathematics, and foreign language instruction. Such assistance will be largely related to expanded State supervisory services and the large equipment acquisition activities authorized under the act. The other positions will be needed: to meet the increased requests anticipated for consultation and assistance in State guidance, counseling, and testing programs; to process an increasing number of private school loan applications; to develop terminology handbooks essential to a proper national system for reporting State educational statistics; and to conduct analyses of the defense educational programs under titles III and V of the act.

Program direction and services

(a) *Regional operations.*—Request has been made in a supplemental appropriation for the fiscal year 1959 to provide regional representatives in five regional offices. Funds requested in 1960 include provision for nine additional positions to provide such regional representation in all field offices for overall field coordination and leadership to the implementation of the National Defense Education Act. An increase of \$178,600 is requested to maintain these services on an annual basis and to provide for the additional staff.

(b) *Other.*—Central direction and services to facilitate and implement the various programs of the Office include the immediate office of the Commissioner, the Laws and Legislation Branch, the Publications Branch, and the Administrative Management Branch. The increased program activities have placed a very heavy workload on each activity under this heading, beyond the capacity of the staff.

An increase of \$229,615 is requested in 1960 for essential services, as follows:

Two additional positions to expand the program planning services of the Commissioner's office;

Two additional positions to provide for an intensive analysis of the operation of the National Defense Education Act and other new statutes in relation to the continuing legislative program of the Office;

Three additional positions to make more adequate provision for the substantial and increasing demands for information, to answer inquiries, and to edit articles, releases, and publications;

Six additional positions to provide specialized administrative management services, such as contracting and grant services, procedures analyses, personnel training services, and budget management services. The increased staff and funds in the program areas automatically increase workload in the management area, and additional staff is essential to the proper functioning of the Office.

Mr. Chairman, in addition I would like to comment on the effect of the House action with respect to a general provision which the Department requested and which was not accepted by the House Committee on Appropriations. Although this provision was not listed specifically under the appropriation heading of the Office of Education, it does affect our activity. A new section 207 was proposed to the general provisions affecting the Department to provide authority for utilizing appropriations available for salaries and expenses for entertainment of officers, visiting scientists, and other experts from other countries and of officials of international organizations. I regret, insofar as the Office of Education is concerned, that this provision was not included in the House bill.

Under various exchange programs established by law and Executive order, the Office of Education is now receiving several hundred visitors from foreign countries each year. Many of these are important representatives of their country and others are prominent educational officials. It has become an increasingly burdensome problem for the staff members of the Office of Education to provide appropriate entertainment and hospitality on an out-of-pocket basis. On the other hand these countries in practically every instance, have official sources for entertainment and are surprised and probably resentful of the lack of such provision when they are received by the Office of Education. One such important mission last year, was the visit of 10 educators from Russia who came to this country following the visit of the American team which traveled to Russia a year ago. I can assure your committee that there was no lack of hospitality for our team in Russia, and conversely the Office staff responded quite loyally to the task of providing entertainment to these visitors while they were our guests. While I am proud of the response that our staff regularly makes to these occasions, I believe that there would be greater equity created if a limited amount of official funds could be made available for this necessary purpose. Also, this would contribute to international understanding if important foreign visitors appreciate that official funds are available for providing official hospitality in this country on a basis comparable to that recognized in their home countries.

The request which the Department has made in section 207 would be in keeping with similar provisions for other Federal agencies and I wish to urge favorable consideration of this matter by the committee.

BUDGET REQUEST

Dr. DERTHICK. The measure, as it came from the House, was in terms of the President's budget, and I can direct your attention to the fact that this calls for a \$3,172,500 increase over the proposed appropriations for this year, but I am sure that the reasons for that increase will be quite obvious to you.

The increase results not only from the National Defense Education Act with all the varying demands of that act, but the acts providing for the captioning of films for the deaf, the expansion of education of the mentally retarded, the amendments to Public Laws 815 and 874, the establishment of science clubs, and the responsibilities of the cooperative research program.

REASONS FOR INCREASE

In general, these are the reasons why we are calling for this increase and I will say that our staff has not increased as rapidly in 1959 as the responsibilities did and that is why our people have had to work weekends and nights, time after time, and, while that has been very inspiring, we cannot keep up such a pace forever, so in the main that is why we are asking for this increase.

Senator HILL. Will this increase be sufficient to do this job?

Dr. DERTHICK. We think it will. We think it is a soundly based and conservative increase and adequate to do the job in 1960. We are prepared to discuss in detail any items that you want us to discuss.

There is one point that I want to call to your attention but I do not want to rush this presentation.

You see under "Statistics and research" the various categories that we have outlined calling for the increase and we are just full of ammunition and information on the why of the increases wherever you see fit to ask a question.

Senator HILL. Of course, your higher education is in connection with your Defense Education Act largely?

PERSONNEL REQUEST

Dr. DERTHICK. Yes, sir; it is. We are not proposing to add any positions in the regular operation there. We do have an amount of \$34,000 to annualize certain positions that we added in 1959, but we are not calling for any new ones in 1960 except for the National Defense Education Act.

It is a sizable sum there to annualize positions that we put on this year and to add eight others.

Senator HILL. The truth is that these increases grow out of the legislation which we passed in the last session of Congress; is that true?

Dr. DERTHICK. Yes, sir. Most all of the increases do grow out of that.

INTERNATIONAL EDUCATION

Now, for example, if you look on page 3, "International education," you see we are not asking for any increase.

Under "State and local school systems," the mentally retarded legislation calls for five positions and the science club legislation calls for two, as I remember it, and then there is one item here, Senator Hill, and I pick this out on purpose to show you that occasionally we are asking for a position that is not attached to the National Defense Act.

Senator HILL. What is that item?

VISITING TEACHER LEADERSHIP

Dr. DERTHICK. This is to add visiting teacher leadership in the Office of Education. What that is is a school social worker.

My staff will smile when I speak of that, but in my own school system I found this one of the most effective approaches to deal with the prevention of juvenile delinquency. This is a trained teacher and social worker, that combination. She knows the classroom, she knows the agencies, and she gets referrals of children that are out of step with life and brings to bear the resources of the school and the community in getting them back in step.

Now, the Office of Education exerted leadership in this field about 14 years ago but then had to drop out and the pamphlet that was published 14 years ago is the pamphlet that inspired us to start it in Chattanooga.

The greatest single thing that we did there in about 15 years of my administration was to start this program under the stimulus of the Office of Education publication but the Office had to relax its leadership. This is just one small advance we are trying to make in a very needed field. I picked this out to show you how it is true that most all of this increase is related to the National Defense Act, but occa-

sionally we have asked for a small advance to meet an outstanding need.

REQUESTS BASED ON PRIOR EDUCATION

Senator HILL. Looking through here, it seems that it is practically all based on the legislation we passed at the last session.

Dr. DERTHICK. It is.

If you remember, paragraph (d) of 1001 of title X of the National Defense Act, which authorizes us to make studies of the impact of the Federal Government on higher education programs——

Senator HILL. Yes.

Dr. DERTHICK. Is another example.

Senator HILL. I would say that that is very definitely related to that provision in the act.

Dr. DERTHICK. Mr. Hughes, will you cite a further example?

COOPERATIVE RESEARCH PROGRAM

Mr. HUGHES. We have added five positions in the program for 1960, sir, to enable us to organize and administer the cooperative research program under Public Law 531 in the manner which we think the Congress intended. As a matter of fact, we have had to carry on that program by the utilization of staff that had been made available for other purposes.

The Assistant Commissioner for Research has had to undertake to administer that program himself and spends a substantial amount of his time on it.

In 1960, we will have requested staff to devote their full time to that program.

Dr. DERTHICK. That program, as demanding as it is, has for the past years been done without an established staff and it is getting to the point where we would suffer in our relations if we do not get competent leadership to manage it.

NEGOTIATION OF CONTRACTS

Mr. HUGHES. We have also added some \$500,000 to funds available this year for the negotiation of contracts under Public Law 531. This increase of \$500,000 will actually permit us to initiate some \$700,000 in new cooperative research next year.

Dr. DERTHICK. You see, we had \$2,700,000 for that program in 1959. We are asking for \$3,200,000 and, of course, that will not begin to take care of the projects that are submitted which are of good priority, but it will let us make a little advance in that program.

Senator HILL. It will mean some progress?

Dr. DERTHICK. Yes, sir.

RESEARCH AND STATISTICS STAFF

Mr. HUGHES. The only other item that is not strictly related to the National Defense Education Act, I believe, sir, would be the four positions that we are adding to our research and statistics staff and those are indirectly related to the National Defense Education Act.

Senator HILL. That last section of the act is a statistical section?

Dr. DERTHICK. That is right, and also the other sections of the

act require us to make studies in order to obtain the information to carry on.

Mr. HUGHES. The four positions added to our educational statistics branch will, in part, offset the increased workload that has been created because of the various requirements of the National Defense Education Act, and also will enable us to keep abreast of other requirements.

Dr. DERTHICK. The National Defense Education Act has been of such an urgent nature that we have had to stop many other operations in order to do the work of NDEA, and this increase compensates for that.

I have another point I particularly want to make, Senator Hill.

ADVANCES UNRELATED TO DEFENSE EDUCATION ACT

Inasmuch as you have asked us to indicate specifically any advances that are not related to the National Defense Education Act, I want to ask Mr. Hughes to make a check list to be sure we have mentioned them all to you.

Senator HILL. And if you do not find them now, you may edit the record and add them.

(The following information was later supplied to the committee:)

In addition to the items mentioned which are not related to the administration of the National Defense Education Act, an increase of \$161,925 is requested to permit the addition of 17 positions in the Division of School Assistance in Federally Affected Areas. The legislation extending and amending Public Laws 815 and 874 made several changes which have substantially increased the workload in the processing of applications and conduct of field reviews.

VISITS OF FOREIGN OFFICIALS

Dr. DERTHICK. I would like to call your attention to page 4 of my summary statement that I may comment on a new section 207, which was proposed to the general provisions affecting the Department to provide authority for utilizing appropriations available for salaries and expenses for the entertainment of officials from other countries and, unfortunately, I feel insofar as the Office of Education is concerned, this provision was not included in the House bill.

I believe, Mr. Kelly, that is a provision included in the budget under "General provisions." We have hundreds of foreign visitors a year. When our people go to their countries they are entertained and we feel that they ought to be entertained over here.

Only week before last, I was at the home of Dr. Cotner, one of our people working in this program. He entertained about 30 guests in his home that night at his personal expense.

They keep doing that the year round.

It is a relatively small sum that we are requesting to entertain these visitors from other countries. They are going to be entertained if our people have to do it out of their own pockets, but I do not feel that it is fair to impose that obligation on them when it continues year after year.

Senator HILL. How much money are you asking for this purpose?

Dr. DERTHICK. I believe it is \$5,000 for the whole Department.

Mr. KELLY. What we asked for, Mr. Chairman, was a general provision authorizing us to use \$5,000 of the funds available to the De-

partment for this purpose. Authority now exists to a limited degree with the Surgeon General and with the National Institutes of Health, but no authority exists with respect to the Office of Education, the Food and Drug Administration, the Office of Vocational Rehabilitation, the Office of the Secretary, and the Social Security Administration for entertainment of foreign visitors.

As you know, delegates of our organization have gone to foreign countries, including Russia, on the cultural exchange programs, and they have been entertained, but when their visitors came over here, except for the employees themselves putting up their own funds, we do not have the authority to utilize Government funds for that purpose.

As a matter of fact, the State Department found it unbelievable that we were not able to return the same kind of entertainment that our people were given.

Senator HILL. They have authority in the State Department?

Mr. KELLY. They do; yes.

Senator HILL. And other agencies of the Government have that authority. You do not mean to increase the overall amount in the bill?

Mr. KELLY. It would not increase the total amount.

Senator HILL. You ask that \$5,000 be made available if needed.

Dr. DERTHICK. For these several agencies within the Department of Health, Education, and Welfare.

Mr. Chairman, I do not want to be out of order here or to do something that is not appropriate, but there is one matter I wish to mention and I hope you will stop me if I am out of order.

Senator HILL. Go right ahead, sir.

OFFICE OF GENERAL COUNSEL

Dr. DERTHICK. The Office of Education has had to draw very, very heavily on the Office of the General Counsel, as you can imagine, in implementing this act. We have had to ask for constant overtime effort which, of course, is not paid, of two lawyers in particular this whole year. They have given us excellent service. They have been very imaginative and helpful in all ways.

We have imposed a great burden on the Office of the General Counsel in this matter, and I hope that the committee will give consideration to their request for an increase, and I mention it only because I feel we are largely responsible for it and I have somewhat of a guilty feeling about it.

I am talking about another office in the Department and maybe that is not in good order.

Senator HILL. That is absolutely in good order, sir, and, as far as the committee is concerned, we are glad to have it.

Is that increase in the budget estimate?

Mr. KELLY. It is, Mr. Chairman, but the House only allowed half of the increase.

Senator HILL. The House allowed half of the increase?

Mr. KELLY. That is correct, sir.

AMOUNT REQUESTED

Senator HILL. How much was the increase all together?

Mr. KELLY. It was \$76,000.

Dr. DERTHICK. I am not speaking for the whole \$76,000, but that part for the General Counsel serving the Office of Education, and I do feel it is worthy of consideration.

Senator HILL. Because you had such a part in incurring that expense?

Dr. DERTHICK. That is right.

Senator HILL. You had a big part in this additional burden and the Congress put the burden on you?

Dr. DERTHICK. That is right, and I feel, Senator, some obligation to call attention to it.

Senator HILL. I am glad you did, Doctor. I am very glad indeed that you did.

Is there anything else you would like to add?

Dr. DERTHICK. No, sir. I believe that completes our presentation.

Senator HILL. As I said this morning, we are always very happy and pleased to have you and your staff here.

If you have any other thought or suggestion before we close these hearings, let us hear from you.

It is very nice to have you.

Dr. DERTHICK. Thank you, sir.

OFFICE OF VOCATIONAL REHABILITATION

STATEMENT OF MISS MARY E. SWITZER, DIRECTOR; ACCOMPANIED
BY E. E. FEREBEE, DEPUTY DIRECTOR; SAMUEL E. MARTZ,
ASSISTANT DIRECTOR, MANAGEMENT SERVICES; AND JAMES F.
KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

GRANTS TO STATES [AND OTHER AGENCIES]

"For grants to States [and other agencies] in accordance with the Vocational Rehabilitation Act, as amended ["\$51,600,000"] \$51,900,000, of which ["\$45,500,000"] \$50,400,000 is for vocational rehabilitation services under section 2 of said Act: and \$1,500,000 is for extension improvement projects under section 3 of said Act [; and \$4,600,000 is for special projects under section 4 of said Act]: *Provided*, That allotments under section 2 of said Act to the States for the current fiscal year shall be made on the basis of ["\$56,000,000"] \$59,500,000, and this amount shall be considered the sum available for allotments under such section for such fiscal year.

"Grants to States, next succeeding fiscal year: For making, after May 31 of the current fiscal year, grants to States under sections 2 and 3 of the Vocational Rehabilitation Act, as amended, for the first quarter of the next succeeding fiscal year such sums as may be necessary, the obligations incurred and the expenditures made thereunder to be charged to the appropriation therefor for that fiscal year: *Provided*, That the payments made pursuant to this paragraph shall not exceed the amount paid to the States for the first quarter of the current fiscal year."

Amounts available for obligation

Description	1959 appropriations	1960 budget to Congress	1960 House allowance
Appropriation.....	\$51,600,000	\$51,900,000	\$51,900,000
Comparative transfer to "Research and training" Office of Vocational Rehabilitation.....	-4,600,000	-----	-----
Total.....	47,000,000	51,900,000	51,900,000

Obligations by activities

Description	1959 estimate	1960 estimate	House allowance
Vocational rehabilitation services.....	\$45,500,000	\$50,400,000	\$50,400,000
Extension and improvement projects.....	1,500,000	1,500,000	1,500,000
Total.....	47,000,000	51,900,000	51,900,000

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
11 Grants, subsidies, and contributions.....	\$47,000,000	\$51,900,000	\$51,900,000

Summary of changes

	Amount
1959 actual appropriation.....	\$51,600,000
Comparative transfer.....	-4,600,000
Total funds available 1959.....	47,000,000
1960 appropriation request.....	51,900,000
Net change requested.....	+4,900,000

	1960 budget estimate	1960 House allowance
Increases, for program items: Vocational rehabilitation services.....	\$4,900,000	\$4,900,000

APPROPRIATE ESTIMATE

RESEARCH AND TRAINING [AND TRAINEESHIPS]

"For research, training, and traineeships, and other special project grants, pursuant to section 4 of the Vocational Rehabilitation Act, as amended, [and] for carrying out the training functions provided for in section 7 of said Act, [\$4,800,000] and for expenses of studies, investigations, demonstrations, and reports, and of dissemination of information with respect thereto pursuant to section 7 of said Act, \$12,500,000."

Amounts available for obligation

	1959 appropriations	1960 budget to Congress	1960 House allowance
Appropriation.....	\$4,800,000	\$12,500,000	\$12,500,000
Comparative transfer from "Grants to States," Office of Vocational Rehabilitation.....	4,600,000	-----	-----
Total.....	9,400,000	12,500,000	12,500,000

Obligations by activity

Description	1959 estimate	1960 estimate	House allowance
Research and demonstrations.....	\$4,600,000	\$6,300,000	\$6,300,000
Teaching grants.....	2,441,600	3,294,700	3,294,700
Traineeships.....	2,358,400	2,905,300	2,905,300
Total.....	9,400,000	12,500,000	12,500,000

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
02 Travel.....	\$25,000	\$35,000	\$35,000
07 Other contractual services.....		75,000	75,000
11 Grants, subsidies, and contributions.....	9,375,000	12,390,000	12,390,000
Total.....	9,400,000	12,500,000	12,500,000

Summary of changes

	Amount
1959 actual appropriation.....	\$4,800,000
Comparative transfer.....	4,600,000
Total funds available 1959.....	9,400,000
1960 appropriation request.....	12,500,000
Net change requested.....	3,100,000

	1960 budget estimate	1960 House allowance
Increases for program items:		
Research and demonstrations.....	\$1,700,000	\$1,700,000
Teaching grants.....	853,100	853,100
Traineeships.....	546,900	546,900
Total change requested.....	3,100,000	3,100,000

APPROPRIATION ESTIMATE

SALARIES AND EXPENSES

"For expenses, *not otherwise provided for*, necessary in carrying out the provisions of the Vocational Rehabilitation Act, as amended, and of the Act approved June 20, 1936 (20 U.S.C., ch. 6A), as amended, **[\$1,400,000]***\$1,738,000.*"

Amounts available for obligation

	1959 appropriations	1960 budget to Congress	1960 House allowance
Appropriation.....	\$1,400,000	\$1,738,000	\$1,738,000
Supplemental appropriation pay increase.....	115,000		
Total.....	1,515,000	1,738,000	1,738,000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
State plans, grants and program evaluation.....	81	\$767,842	90	\$870,054	90	\$870,054
Specialized services to States.....	31	342,834	37	388,638	37	388,638
Research and demonstrations.....	9	84,238	14	119,415	14	119,415
Training and traineeships.....	9	88,798	13	118,779	13	118,779
Administration.....	29	231,288	30	241,114	30	241,114
Total.....	¹ 159	1,515,000	¹ 184	1,738,000	¹ 184	1,738,000

¹ Excludes commissioned officers on reimbursable detail from Public Health Service as follows: 1959, 7 positions; 1960, 8 positions.

Obligations by objects

Description	1959 estimate	1960 estimate	House allow- ance
Total number of permanent positions.....	159	184	184
Full-time equivalent of all other positions.....	2	2	2
Average number of all employees.....	154	174	174
Number of employees at end of year.....	179	204	204
Direct obligations:			
01 Personal services.....	\$1,230,000	\$1,401,700	\$1,401,700
02 Travel.....	90,000	105,000	105,000
03 Transportation of things.....	1,500	2,000	2,000
04 Communication services.....	24,000	28,500	28,500
05 Rents and utility services.....	2,364	4,400	4,400
06 Printing and reproduction.....	33,000	39,000	39,000
07 Other contractual services.....	43,000	49,500	49,500
08 Supplies and materials.....	10,000	12,000	12,000
09 Equipment.....	5,000	11,500	11,500
11 Grants, subsidies and contributions.....	72,000	80,000	80,000
13 Refunds, awards and indemnities.....	2,500	2,500	2,500
15 Taxes and assessments.....	1,636	1,900	1,900
1958 obligations for 1959 program.....	-390		
Total obligations.....	1,514,610	1,738,000	1,738,000
Add: 1959 appropriation available in 1958.....	+390		
Appropriation.....	1,515,000	1,738,000	1,738,000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	159	\$1,400,000
1959 supplemental appropriation.....		115,000
Total appropriation.....	159	1,515,000
1960 appropriation request.....	184	1,738,000
Net change requested.....	¹ +25	+223,000

¹ Excludes an increase of 1 commissioned officer on reimbursable detail from Public Health Service.

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases:				
For mandatory items:				
Extra days pay (261 days in 1959 and 262 days in 1960).....		\$4,619		\$4,619
Annualization costs for 3 additional positions authorized in 1959.....		8,308		8,308
Subtotal.....		12,927		12,927
For program items:				
State plans, grants, and program evaluation.....	¹ 9	91,480	¹ 9	91,480
For specialized services to States.....	6	44,902	6	44,902
For research and training.....	9	64,632	9	64,632
For administration.....	1	9,059	1	9,059
Total change requested.....	¹ 25	223,000	¹ 25	223,000

¹ Excludes an increase of 1 commissioned officer on reimbursable detail from Public Health Service.

New positions requested

	Grade	Annual salary
State plans, grants and program evaluation:		
(3) rehabilitation facilities specialists.....	GS-12.....	\$25,023
Fiscal analyst.....	GS-11.....	7,030
Research analyst.....	GS-11.....	7,030
Secretary.....	GS-5.....	4,056
Statistical clerk.....	GS-4.....	3,765
Clerk-stenographer.....	GS-4.....	3,765
Medical consultant.....	C. O.....	10,000
Total (9).....		60,669
Specialized services to States:		
Management analyst.....	GS-12.....	8,341
(2) rehabilitation adviser-specialists.....	GS-12.....	16,682
Rehabilitation adviser-specialist.....	GS-9.....	5,990
(2) clerk-stenographers.....	GS-4.....	7,530
Total (6).....		38,543
Research and demonstrations:		
Research analyst.....	GS-13.....	9,901
Research analyst.....	GS-12.....	8,341
Fiscal analyst.....	GS-12.....	8,341
(2) clerk-stenographers.....	GS-3.....	7,030
Total (5).....		33,613
Training and traineeships:		
Rehabilitation adviser-specialist.....	GS-13.....	9,901
Rehabilitation adviser-specialist.....	GS-12.....	8,341
Grants assistant.....	GS-6.....	4,493
Secretary.....	GS-4.....	3,765
Total (4).....		26,500
Administration: Accounting clerk (1).....	GS-5.....	4,056
Total new positions—all activities (25).....		163,381

PREPARED STATEMENT

Senator HILL. Miss Switzer, do you want to file your full statement for the record?

Miss SWITZER. I would like to, Mr. Chairman, if I may.

I know that you are pressed for time this afternoon and you know I could talk until midnight on the rehabilitation story.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, OFFICE OF VOCATIONAL REHABILITATION

GENERAL REMARKS

Mr. Chairman and members of the committee, this year, again, I am pleased to be able to report that more of our disabled are being served more adequately and that more are going into useful jobs than ever before in our history. The year 1958 was a year of significant accomplishments and the growing support for the rehabilitation program is reflected in our plans for 1959 and the request for 1960 which you have before you.

Number rehabilitated.—A record high total of 74,317 disabled persons were rehabilitated into useful employment during 1958, an increase of 3,377 over the previous year. In addition there were 18,584 disabled persons who were prepared for and ready for employment on June 30, 1958.

Number of disabled served.—The number of disabled persons served during the year by the State agencies passed a quarter of a million (258,439), an increase of 8.3 percent over the 238,592 served in 1957.

More severely disabled being served.—The number of the more severely disabled being served continues to increase; about 10 percent more severely disabled received purchased services in 1958 than in the previous year.

Greater use is being made of rehabilitation facilities for serving the disabled; 8,326 persons received services in such facilities in 1958, 21 percent more than the 6,880 persons served in this way in 1957.

More rehabilitation facilities being set up.—The State agencies are continuing to utilize rehabilitation funds to enlarge their resources of rehabilitation facilities and workshops, thereby increasing the potential for serving the severely disabled. States helped establish or enlarge 91 such facilities in 1958, about the same level as in the previous year.

Reducing dependency.—Approximately 15,000 of the disabled who were rehabilitated in 1958 had been receiving public assistance; 53,717 of the 74,317 rehabilitated were unemployed at the time of their acceptance for rehabilitation.

State agency staffs are increasing.—There is an encouraging growth in the size of the State agency staffs serving the disabled. This year, the total State agency personnel will exceed 4,200 an increase of about 300 over 1958 and of about 1,500 (55 percent) over 1954.

The number and variety of research and demonstration grants is increasing.—During 1958 the Office was able to approve 81 new projects dealing with a very broad range of rehabilitation problems. Demonstration projects to provide improved techniques for serving the severely disabled—the cerebral palsied, the mentally retarded, the disabled with emotional problems, and the near blind are being extended. We now have 43 such projects in 30 States.

Training qualified rehabilitation workers.—Training programs are moving ahead steadily in the effort to reduce the shortages in qualified counselors, physicians in rehabilitation, speech and hearing therapists, and others.

THE DEVELOPING PROGRAM

During the last few years, and particularly since 1954, this Office has been faced with two major tasks which have had to be carried out simultaneously.

The first has been to help the State vocational rehabilitation agencies adapt their programs to the expanded authority provided in the amended Vocational Rehabilitation Act in order to increase the number of disabled people served and the number rehabilitated.

The second has been to prepare the rehabilitation program for the inevitable changes which are resulting from the changing age distribution of our population and the changing nature of the disabilities among our people.

We feel a sense of achievement in both these responsibilities. The number of disabled men and women served by the State agencies and the number restored to useful activity and jobs has increased each year. At the same time, we see real progress in adapting State agency programs to new needs, and in moving into new areas of disability where rehabilitation services means pioneering.

On the latter subject, we have been, and are, confronted with a greater problem of concept than we are of procedure. Dr. Howard A. Rusk has contributed to a better understanding of this changing concept in his outstanding new book, "Rehabilitation Medicine," in which he and a number of collaborators have added significantly to the professional rehabilitation literature. This authorita-

tive volume brings into focus the nature of the rehabilitation problems which have been emerging in this country in the wake of our dramatic medical progress. It helps explain some of the sharp philosophical changes in rehabilitation which have been made necessary by the recent successes in medicine and surgery which are saving more and more lives.

"Times have changed. We now know physiologically that man can live with one-half of one lung, one-third of a kidney, one sixty-fourth of a liver, one-half the normal volume of blood, and without a stomach. Although far from whole anatomically, he can function effectively."

Times have changed—and it has been an obligation of the public program of vocational rehabilitation to see that our work changes with them, that the services we are prepared to furnish to the disabled men and women of this country match in modern effectiveness the best in curative medicine and surgery.

This has been, and remains, an overriding challenge to this program. It has been a guiding concept in the work done during the past fiscal year and underlies the request for fiscal year 1960.

The obligation to build as we serve

It is not enough that the vocational rehabilitation program should grow. It must grow in the direction of foreseeable need. The need presents itself in several forms:

The need to build the State agencies.

The need to invest in our future competency through research.

The need to reverse the trend of mounting shortages of adequately trained professional workers in rehabilitation.

The need to prepare this program—technically, financially, and administratively—for the changing caseload of the future, dominated as it will be more and more by persons whose disabilities represent an experimental stage in vocational rehabilitation.

The need to strengthen the Office of Vocational Rehabilitation itself.

The State agencies.—The Office of Vocational Rehabilitation feels deeply its responsibilities to the State rehabilitation agencies in this Federal-State partnership. This relationship, developed over many years of successful cooperative effort on behalf of handicapped people, is a foundation on which we can and must build for the changes in the coming years.

In the process of building, we are working intensively with the State agencies to help them achieve a constantly higher degree of professional competency, increased State financial support, a rising sensitivity to medical developments and their effects on rehabilitation of the disabled, and a continuing growth in leadership.

Last year the State vocational rehabilitation agencies served 258,439 disabled people, an increase of 19,847 over 1957. A total of 74,317 disabled men and women were rehabilitated and placed in useful jobs during 1958, which represents an increase of 3,377 over 1957. In 1959 the States expect to increase the number rehabilitated to 82,000. The steady annual growth is reflected in the plans for 1960, when the State agencies anticipate serving 313,653 disabled people and rehabilitating about 90,000.

The increase in State funds available for vocational rehabilitation proceeds on a most promising scale. In 1958 the total of State funds available were \$25.3 million, an increase of \$3.7 million over 1957. The States estimate that they will have available during 1960 a total of about \$31.3 million, compared with an estimated \$28.3 million during the current year 1959.

We have worked cooperatively with the States to improve both the number and quality of State agency counselor personnel, and we are most pleased and encouraged with the results to date. Through the training grant programs, graduates in rehabilitation counseling, well-prepared with academic training, are now entering the rehabilitation programs of the State agencies. In addition, most State agencies have conducted special institutes for new counselors, to give them specific indoctrination and training. We have helped the States hold other specialized courses for counselors to provide technical proficiency in such special areas as counseling of the blind, the deaf, amputees, the mentally retarded, the emotionally ill and others.

We have been especially pleased with the results of the series of executive development seminars provided for State directors last year. The widespread participation of the State directors, and their ready response to the opportuni-

ties for development which were provided in the courses, are eloquent testimony to the possibilities for further development of our State agencies as rehabilitation faces the new and larger obligations ahead.

The building process among the State rehabilitation agencies has been in evidence in a number of other ways. For example, during the past year, the State Vocational Rehabilitation Council, which for many years has been the official advisory body of the State agencies to this Office, has accomplished a major overhauling of its organization. We have given all possible help to the Council in this self-appraisal and reorganization, for we know from long experience the vitally important role which this group, as representative of the collective thinking of the State directors in this country, mean to the sound development of vocational rehabilitation nationally.

A number of our research projects are also adding to the strengthening of the agencies. Notable among these is the study being carried on by the Arkansas agency on ways to make best use of the professional talents of the counselors, and a study being done by the University of Utah in cooperation with three of the State agencies on the factors related to the successful rehabilitation of their clients.

Research.—We recognize that, in any effort to build for the future of rehabilitation, research is the beacon light which constantly shines out ahead. The growth of our research and demonstration program has been on a comparatively modest scale which prudence would dictate in the formative years of a new grant program. This same general rate of growth is envisioned for 1960, for which \$6.3 million is requested. This would be an increase of \$1.7 million over 1959; it would permit continuation of approximately 147 projects in operation at the end of the year, and the approval of about 75 new investigations and demonstrations.

Many of these projects are grappling with problems which have frustrated rehabilitation efforts for years. Perhaps one of the most difficult of these is the rehabilitation of persons with mental illness, who make promising progress in State mental hospitals but are not prepared to cope with the pressures and demands of community life, employment, family responsibilities, etc. We are now supporting 14 projects dealing with mental illness and the emotionally disturbed. One of these is particularly interesting to us because it dramatically illustrates what can happen in restoring the mentally ill to useful lives when the appropriate components are put together under professional leadership.

Since 1956, we have helped support a rehabilitation project sponsored by Agnews State Hospital in California, which has established a unique type of "halfway house" to help bridge this gap between hospital care and community living. With a special staff, skilled in preparing these about-to-be-discharged patients for resumption of regular living, small groups (about seven at a time) are transferred to this special facility. The unusual aspect of this halfway house is that it was employer sponsored and now has about 50 business firms in the area cooperating in the project.

The results have fulfilled the hopes of the sponsors. Forty of the residents are now self-supporting. One of them who spent 21 years in the hospital is now at work after only 6 months' residence in this halfway house.

The range of projects now underway cover important facets of the rehabilitation program—laboratory and clinical studies to improve rehabilitation procedures, demonstration of modern rehabilitation methods in a variety of organizational and community settings, evaluation of psychological and medical procedures, investigations of employment obstacles for handicapped persons, experimentation with new methods of State rehabilitation agency organization and operation, and others.

The volume of applications is increasing and it has been found necessary to institute a system of priorities among those applications which the National Advisory Council on Vocational Rehabilitation has recommended for approval. Research funds for new projects in 1959 have practically all been committed, and there is still another meeting of the Council in April. The projects considered and approved at this meeting will, in the main, be financed in fiscal year 1960.

Because the field of rehabilitation research is so broad and the problems so varied, we have sought advice from the leaders in the field to help insure that research is applied to meet those needs which are paramount in the total spectrum of investigations in rehabilitation. We already have sought such guidance in certain specialized fields such as medicine, psychology, and speech and hearing. In the field of prosthetic devices, a long-range coordinated re-

search program embracing prosthetics, bracing and assistive devices, has been developed by the Prosthetic Research Board of the National Academy of Sciences-National Research Council, at the request of this Office. Here we see the merging of rehabilitation planning with many of the same scientific developments which have made possible today's era of electronics, missiles, and the exploration of space. Many of these scientific principles are now being pioneered in the development of miniature electronic power mechanisms, in such new devices as the "artificial muscle," and in the research for practical substitutes for amputated or paralyzed limbs.

I am glad to report, too, that the program of selected demonstration grants, designed to extend the results of earlier successful projects into other localities under controlled conditions, is being expanded. A total of 43 such projects has been approved thus far.

The personnel problem ahead.—An excellent beginning has been made in the training program, to increase the supply of well-trained professional personnel in the several specialties which constitute rehabilitation today. However, looking realistically at the problems ahead, in terms of foreseeable personnel shortages, it is quite evident that the success of any expanded rehabilitation effort in this country will rest squarely upon the results of an expanded professional training program.

Steady progress is being made in the development of qualified personnel for State rehabilitation agencies and this has been duplicated in other aspects of our training program. This year traineeship grants were made to 30 approved residency training programs in physical medicine and rehabilitation, covering traineeships for about 145 physicians. This is a marked contrast to the meager beginnings in 1955 when there were only five physicians in our residency program. Similarly, grants are now being made to 25 of the 82 approved schools of medicine, a marked increase over the 6 grants in 1956. These twin developments are a solid beginning of a program designed to provide the pivotal medical staff needed to put the expanded rehabilitation program into high gear.

We are also increasing our program in the field of speech and hearing. We recently sponsored a most interesting short-term training program in stuttering therapy conducted by the outstanding authority in the field, Dr. Wendell Johnson, at Iowa, and a most profitable training program in aphasia and auditory disorders at the University of Wisconsin.

Dramatic changes are also taking place in the prosthetics education program. Not only are the basic prosthetic teaching programs being expanded but the programs for utilizing the latest bracing techniques for upper extremities are being extended. We are reaching a steadily increasing number of physicians, therapists, and other professional people who take these new skills back to the disabled patients of their local communities across the country.

The Office of Vocational Rehabilitation.—The request for 1960 provides for 25 additional staff for this Office. This has been so long deferred, is so vitally needed, and is so closely involved with the total success of this public rehabilitation program that I feel obligated to provide the committee with some background on this staffing problem.

Prior to the enactment of Public Law 565 in August 1954, this Office administered one grant program, which provided Federal funds and leadership to the State rehabilitation agencies, and the Randolph-Sheppard Act which deals with vending stands for the blind. With the enactment of Public Law 565, completely new programs were introduced—for a special grant program of extension and improvement projects to further aid the State agencies, and for centrally operated programs of project grants for the training of professional personnel in a variety of disciplines, and for the establishment and operation of a nationwide system of research grants, and for a program for research fellowships.

The 1954 Medical Facilities Survey and Construction Act (Public Law 482) charged this Office with further responsibility, in cooperation with the Surgeon General of the Public Health Service, in carrying out the new provisions for the construction of rehabilitation facilities.

The 1954, 1956, and 1958 amendments to the Social Security Act designated the State vocational rehabilitation agencies as the agency of choice to make disability determinations for applicants for "freeze" and cash disability benefits under the old-age and survivors insurance system. In all but four States, the State rehabilitation agencies now perform this function. It further called upon the State vocational rehabilitation agencies to evaluate all such applicants in terms of their potential for rehabilitation, provide services for those found to

have such potential, and to carry out, where appropriate, certain sanction provisions of the law for those who declined rehabilitation services without proper cause.

Beyond these very extensive statutory increases in the responsibilities of this Office, the mounting interest in rehabilitation—locally, by States, and nationally—and the demand not alone for more service but for greater professional guidance and for cooperation with other national organizations, has added immeasurably to the workload imposed upon this Office.

Since 1955, there has been an increase of only 33 positions for this Office to carry out this vast increase in responsibility. Of this increase, 17 positions have been strengthening our field organization. We now have a stronger field staff than before—but the burden upon the central office staff has reached the point where it threatens the effective administration of this program.

In the last 3 years, we have taken many steps in an effort to discharge our responsibilities without a substantial increase in central office staff. We have—

Increased the size and responsibilities of the regional office staff, and delegated to them many responsibilities formerly discharged by central office.

Developed and placed in operation simplified methods of processing applications received in the research grant program and in the training grant program.

We have conducted indoctrination programs for all new employees—professional, secretarial, and clerical and provided the staff with short courses in simplified correspondence.

Reorganized the Office of Vocational Rehabilitation in mid-December 1958, in an effort to distribute available staff skills in the most efficient manner possible.

It is my hope that the committee will recognize this request for 1960 staffing as a vitally essential part of proper planning for the future of this program.

Proposed changes in appropriation structure.—Our request for funds for 1960 is somewhat changed from the current year insofar as the appropriation structure is concerned. The amount for the research and demonstration grants program which were formerly included in the appropriation for grants to States and other agencies has been separated from this appropriation and combined with the appropriation for training grants and traineeships. This will help clarify for the State agencies and for other organizations the amounts which are actually available to help the State programs.

GRANTS TO STATES

The 1960 budget estimate of \$51.9 million for grants to States includes \$50.4 million for the support of basic vocational rehabilitation services under section 2 of the act and \$1.5 million for extension and improvement projects under section 3 of the act.

Basic support grants

	1958 actual	1959 estimated	1960 estimated
State funds.....	\$24, 974, 604	\$27, 890, 232	\$30, 881, 300
Federal grants.....	41, 083, 273	45, 500, 000	50, 400, 000
Total.....	66, 057, 877	73, 390, 232	81, 281, 300

The 1960 estimate for support of vocational rehabilitation services under section 2 of the act is \$50,400,000, as compared with the 1959 appropriation of \$45,500,000. This is an increase of \$4,900,000 or 11 percent.

The number of disabled men and women rehabilitated into employment continues to increase at a steady pace. The States reported a record new high of 74,317 rehabilitated during 1958 and in addition, 18,584 prepared for and ready for employment as of June 30, 1958. The States plan to increase the number rehabilitated to 82,000 in 1959 and 90,000 in 1960.

Not only are the numbers rehabilitated relatively new highs but the total number of disabled persons served by the State agencies continues to increase. It is anticipated that in 1960 an estimated 313,653 persons will be served during the year, a 21 percent increase over 1958.

Success in rehabilitating the more difficult cases is dependent upon the availability of community facilities and workshops for evaluation of the rehabilitation potential and for the treatment and training of the handicapped persons. Investment in the enlargement of rehabilitation facilities and workshops continues to be substantial. These funds are spent by the States for the expansion, remodeling and alteration of existing buildings, equipment and initial staffing of rehabilitation facilities. The facilities are receiving a growing number of clients. In 1958 alone services were provided 8,326 clients at such centers, an increase of 21 percent over 1957.

In order to evaluate the effect of increasing costs on the State rehabilitation program a review was conducted of each State agency during 1958. The study reveals that approximately half of the increase in the case service expenditures in 1957 over 1954 was attributable to price increases and more comprehensive services to the disabled; the other half was due to services for additional clients.

State agency staffs are expanding to meet the increased demands for service. An important step in assisting the States to develop new personnel to the fullest extent was the launching of a program of inservice training grants to State agencies in 1958. It is anticipated that 65 State agencies will participate in this program by 1960 when State agency staffs should reach 4,640 man-years.

Allotment base.—The allotment base for the support program requested for 1960 is \$59.5 million; an increase of \$3.5 million over the \$56 million base in 1959. It compares with the \$3 million increase in the base provided in fiscal year 1959 over 1958. The use of the allotment base principle and the continuation of a modest year-to-year increase in the base allows the State to move ahead with the basic program of services to the disabled while keeping the Federal appropriation at the lowest figure consistent with actual State plans. The number of States using the full allotment is steadily increasing. In 1958, 13 States used 100 percent of their allotment, in 1959 the number is 18, and in 1960 a total of 26 States have indicated they will use 100 percent of their allotment.

State funds estimate.—State support for the program continues to increase. In 1959 State funds for the support program will amount to \$27,890,232, a 100 percent increase over State funds in 1954, the last year prior to the amendments of the Vocational Rehabilitation Act. Increases in individual States range from 27 percent to 300 percent. An additional overall increase in State funds of \$2,991,068 or 11 percent over 1959 is anticipated for 1960. This rate of increase compares favorably with the State experience during recent years. In fiscal year 1958, for example, the first year of a biennium for many States, the increase for State funds was 18 percent over the previous year and for the current fiscal year 1959 the estimated increase is 12 percent.

Extension and improvement grants

	1958 actual	1959 estimate	1960 estimate
State funds.....	\$364, 828	\$423, 206	\$431, 159
Federal grants.....	1, 094, 483	1, 269, 617	1, 293, 476
Total.....	1, 459, 311	1, 692, 823	1, 724, 635
Federal allotment (appropriation).....	1, 500, 000	1, 500, 000	1, 500, 000

The 1960 requirement for extension and improvement projects under section 3 of the Act is \$1,500,000, the same as in 1959.

Federal grants under this program offer encouragement and incentive to the State vocational rehabilitation agencies in undertaking improvement of their services without diverting basic support funds necessary for expansion of their current programs.

In 1958, 105 projects were carried on in the 41 participating States. It is estimated that the amount requested in 1960 matched with the State funds, will provide for 120 projects. About 80 percent of the 1960 request is needed to support projects started in prior years.

Projects initiated to date cover a wide variety of fields of activity. During 1958, extension and improvement projects were used to enlarge 38 rehabilitation facilities and workshops (including 6 speech and hearing facilities and 12 facilities and workshops for the blind). There were 25 projects which improved the overall administration of the program and 42 projects which provided im-

proved or specialized services to the mentally and emotionally ill, mentally retarded, and other disability groups.

The program has resulted in greatly improved State agency operations, for as projects demonstrate their value, they are absorbed under the basic support provisions of the Vocational Rehabilitation Act.

Research and training

	1958 actual	1959 estimate	1960 estimate
Research and demonstrations.....	\$3, 599, 599	\$4, 600, 000	\$6, 300, 000
Training and traineeships.....	4, 379, 675	4, 800, 000	6, 200, 000
Total.....	7, 979, 274	9, 400, 000	12, 500, 000

A total of \$12.5 million is requested for the research and training grant programs, an increase of \$3.1 million over 1959. The requested increase for 1960 includes an additional 1.7 million for research and demonstrations, and an additional \$1.4 million for training grants and traineeships.

Research and demonstrations

The \$12.5 million total requested for research and training in 1960 includes \$6.3 million for support of the research and demonstrations grant program. Of the \$6.3 million requested, \$4.1 million is needed to continue support of the 147 active projects approved in prior years including the national pilot demonstration center for the Greater Washington area and \$2.2 million to support an estimated 75 new projects. In this connection, my remarks at the dedication of the National Orthopaedic and Rehabilitation Hospital last October, may be of interest to the committee, and, with your permission Mr. Chairman, I should like to present these for the record. Three new projects would be selected from an estimated 300 applications. The 75 new projects which we would be able to approve in 1960 compare with the 81 new projects approved in 1958 and about 60 new projects estimated for 1959. The amount requested maintains the number of new projects at about the level of the past several years.

The research and demonstration projects to be supported in 1960 would be those authorized under section 4(a)(1) and section (7) of the Vocational Rehabilitation Act. Under section 4(a)(1) the grants are made to public agencies, educational institutions and nonprofit organizations to partially support research and demonstration projects concerned with developing methods and techniques for improving rehabilitation services, particularly for the more severely disabled persons. The authority under section 7 enables this Office to contract for studies and investigations and to disseminate the results of this research. Our experience since 1955, when the research grant program was started, indicates it is important that this Office be able to enter into research arrangements on a contract basis when this is the most feasible way of expediting study of an important problem facing the rehabilitation program. Research in the field of prosthetics and bracing and in electronics to assist those with speech and hearing and sight disabilities offer immediate opportunities for such contract research. The use of contract authority would not be extensive.

The research projects cover a wide variety of rehabilitation problems among many categories of disability. Each project is of significance in attacking one of the numerous unexplored areas in rehabilitation. For example, one of the projects is investigating more effective methods in the rehabilitation of hemiplegics with aphasia. A number of projects are exploring techniques for extending rehabilitation services to various groups among the mentally ill such as the chronic schizophrenic. There is a need to understand better the factors which motivate individuals to undergo rehabilitation; to gain greater insight about the feelings and acceptance of dependency which prevent rehabilitation and to explore methods and techniques by which these feelings and attitudes may be modified and reduced. The problems inherent in the vocational and personal adjustment of disabled persons are among the most difficult, complex and challenging in rehabilitation.

A group of projects are exploring the employment experiences of different groups of disabled persons such as the deaf, epileptic, and hemiplegic, while several others are concerned with the rehabilitation and reemployment of the industrially injured.

There is an urgent need for substantial modification of our present efforts to secure employer acceptance of disabled workers and in providing for the rehabilitation of injured workers. A study of employer policies and hiring practices reveals that many of the so-called roadblocks to the employment of disabled persons toward which employer education programs are being directed do not exist and that a new approach is required if substantial gains in the utilization of our disabled manpower are to be realized.

One of our most active research demonstration areas is the one dealing with the mentally retarded. A variety of research projects are evaluating vocational and personal factors affecting the adjustment of the mentally retarded on a job, studying employer attitudes toward the retarded, and examining the effectiveness of work shop evaluation and experience on their employment potential. In addition to these experiments we have 14 workshop demonstration projects over the country leading the way in showing the latest techniques which have proved effective in evaluating and placing the retarded young person in employment. And, I would like to add that the program authorized by the Congress in the last session for grants by the Office of Education to provide training for leaders in educating the mentally retarded could be very significant in meeting one of the biggest problems of the mentally retarded.

A number of projects are providing new insights, methods, and procedures for establishing vocational rehabilitation services to homebound disabled individuals or those living in rural areas. Several projects are directed toward the study of various phases of rehabilitation center administration or organization, including the urgently needed data on actual costs and income of various sizes and types of centers, as a means of establishing a uniform system of statistical and financial reporting.

There is a mounting interest among State administrators in investigating the effectiveness of present operations and administrative organization. During the current year, planning is being started to develop a series of research investigations to study methods of improving the effectiveness of State agency organization and operations and of providing rehabilitation services to specific disability groups, persons in rural areas, and similar problems. It is planned that at least three of these projects will be started next year.

Important rehabilitation problems are being identified in increasing numbers as evidenced by the wide variety of research projects currently being supported. The identification of new rehabilitation problems requiring systematic study will continue to increase during fiscal 1960. It is important that the growing interest of the creative research talent of our universities, medical schools, and research organizations be maintained by providing financial support of a reasonable proportion of projects which can make a valuable contribution.

Training and traineeships

The requested appropriation of \$12.5 million for research and training includes \$6.2 million to continue support of the training program, an increase of \$1.4 million over the 1959 appropriation. The increases will cover the rising costs of instruction, provide an increase in traineeship stipends in order to attract better qualified students and establish urgently needed new training projects and to support additional traineeships.

Current program

Personnel shortages are severe in all of the professional fields which serve disabled people. Rehabilitation programs in hospitals, rehabilitation centers, State vocational rehabilitation agencies and other programs for the handicapped have experienced persistent difficulties in their efforts to expand services, because of lack of trained personnel. Qualified teaching personnel for professional training programs also are in short supply.

Teaching grants and traineeships are being awarded in rehabilitation counseling, medicine, nursing, occupational therapy, speech and hearing, prosthetics education, physical therapy, rehabilitation center administration, and other closely related fields. Approximately 150 different educational institutions have received grants to help conduct long-term or short-term training courses.

Rehabilitation counseling

Major emphasis is given to preparing students for employment in the State vocational rehabilitation agencies. We feel keenly our responsibilities for helping the State agencies as they proceed with expansion of their programs of service. In 1954, only four schools offered complete graduate preparation in

rehabilitation counseling; their output was about 12 graduates a year. Since then, the number of schools and the number of students have grown steadily so that 29 colleges and universities in 22 States are now offering training, and the number of OVR traineeships has risen to about 510.

The 1960 estimate provides for four new projects in geographical areas not now adequately covered and provides for an additional 31 rehabilitation counseling traineeships.

Medicine

Our training grants in the field of medicine are made to increase the number of qualified specialists in physical medicine and rehabilitation and to make it possible for medical schools to teach rehabilitation principles and practices to all medical students so that the medical practice in the future will be imbued with rehabilitation concepts.

Although the number of medical schools providing this teaching through training grants has grown from 6 in 1956 to 25 in 1959 this number still represents only a minor fraction of the 82 approved schools of medicine. Our plan for 1960 is to increase to 30 the number of medical schools which provide this urgently needed type of training to their student bodies.

Prosthetics education

One of the most important aspects of our training program are the grants related to prosthetics education. This year teaching grants have enabled four educational institutions to employ a full-time faculty to develop teaching materials and to conduct short-term courses in prosthetics and orthotic rehabilitation. These courses are reaching about 650 physicians, therapists and counselors. The courses in functional bracing of upper extremities started this year will be continued in 1960 and work is beginning on the planning of a training program for teaching the bracing of the lower extremities. These training activities will contribute significantly to the supply of qualified personnel who are knowledgeable in the latest techniques for producing and fitting devices that will increase the potentials of rehabilitating the disabled.

Speech and hearing therapists

The shortage of qualified speech and hearing therapists is acute. The most recent estimates of manpower needs point to an estimated 8,000 additional therapists needed for services in rehabilitation centers and hospital clinics, exclusive of the needs of the public schools for speech correctionists and teachers of speech. In 1959, long-term teaching grants were made to 11 educational institutions; traineeship grants were given to 40 trainees. However, in 1959 grants for training in speech and hearing fell far short of the need. In future years a marked upward swing in both size and number of training grants will be necessary if those with speech or hearing disorders are to be adequately served.

In addition to support of long-term training in speech and hearing, OVR grants have made it possible to conduct short-term courses (ranging from 1 to 4 weeks) for speech and hearing therapists and personnel in related fields. These brief courses have been of an advanced or refresher type in such areas as esophageal speech for laryngectomized individuals, aphasia, and auditory disorders. Nearly all have emphasized interprofessional collaboration with other members of the rehabilitation team.

The 1960 request provides for a small increase in this field. This amount will make possible four new grants to educational institutions in the South, the Pacific Northwest, and the New England areas and thereby improve the geographical spread of OVR-supported training programs. It will also permit presently supported universities to expand their clinical practice facilities and accept more graduate students. An increase is also requested to raise the number of traineeships from 40 to 57.

Other fields

Teaching and traineeship grants for long-term professional training in nursing, occupational therapy, physical therapy, psychology, social work, and rehabilitation center administration are a vital part of our training program. This segment of our program will be relatively static however, since the 1960 request provides for an increase of only one teaching grant in the field of physical therapy and the addition of 20 traineeships in the fields of occupational therapy and physical therapy.

Short-term training

It is important to note the impressive number of rehabilitation workers who have received special, intensive instruction in selected methods and phases of rehabilitation, through the short-term training and traineeship grants. Less than 10 percent of our training funds go into this short-term instruction, yet the dividends are very high. Success in rehabilitation today is increasingly a question of having the very special skills needed to understand and overcome problems of severe disability—and most of these must be learned through special instruction. At the same time, the short-term training courses have had a widespread influence in creating better understanding of the whole broad problem of disability and rehabilitation. In 1959, we expect to reach 1,200 professional workers through these short courses and the 1960 program provides for a continuation at this level.

Research fellowships

In 1958, 10 fellows received rehabilitation research fellowships totaling \$36,800 for the conduct of independent research in rehabilitation or to secure advanced training in research methods. These include a very interesting project to develop materials for State agency counselors and others on the usefulness of certain psychological tests of the adult deaf, a study of the case histories of the social adjustment of blind persons, and a study of the cardiopulmonary responses of normal subjects and patients with heart disease during actual work conditions on the job. In 1959, it is estimated that the number will be increased to 25 and that \$100,000 will be granted. In 1960, awards amounting to \$145,000 will be made to an estimated 35 fellows.

SALARIES AND EXPENSES

A 1960 appropriation of \$1,738,000 is requested to provide 184 positions and 8 commissioned officers on reimbursable detail from the Public Health Service. The request represents an increase of \$223,000 over 1959 and provides for 25 new positions including 1 commissioned medical officer.

The current staff of 167, including 7 commissioned officers from Public Health Service, is inadequate to handle the expanding program for which the Office of Vocational Rehabilitation is responsible: (1) the grants to States for vocational rehabilitation of the disabled; (2) the Randolph-Sheppard program for State agency licensing of blind persons to operate vending stands; (3) the administration with the Public Health Service of the rehabilitation facilities provision of the Medical Facilities Survey and Construction Act (Hill-Burton program); and (4) the centrally operated research and training grant programs.

It is becoming increasingly evident that our staff, particularly in the central office, is spread too thin to handle effectively the growing responsibilities and workloads arising from the expanding rehabilitation program. Although we have shifted some positions to the research and training grant programs in order to strengthen these seriously understaffed areas we have not been able to keep up with the rapidly growing workloads. Similarly, the 91 State programs are expanding both in scope and in size and their requests for service and assistance both on program and administrative problems are becoming more than our limited staff can manage. There is, moreover, a growing volume of requests for advice and assistance from National, State, and local nonprofit agencies who are concerned with the disabled. These groups are invaluable in developing the support and understanding of the rehabilitation program and the size of the present staff does not permit effective utilization of these resources.

The requested staff increase for 1960 is needed in the following major areas:

1. The rapidly growing research and demonstration program, and the training and traineeship program. These activities are completely federally operated. The staffs currently administering these programs are unable to handle the mounting workloads. The nine additional positions requested for these functions is the minimum necessary to cope with (a) the anticipated volume of new applications under the increased grants requested in 1960, (b) the administration of a steadily increasing number of active projects which carry over from year to year, and (c) the need to assist applicants to develop effective projects and to stimulate the universities, medical schools, and other qualified organizations to develop research on the more urgent rehabilitation problems.

2. The increased responsibilities and workload in the regional offices. Five additional positions including one commissioned medical officer are requested

for those regions with the largest increase in workload during the year due to (a) the expanded research and training grant programs, (b) the increased volume of applications under the expanded Hill-Burton program, and (c) the steadily increasing volume of work with the State vocational rehabilitation agencies on problems in the fiscal, administrative program areas arising out of their expanding programs. Two additional positions are needed in headquarters to backstop the field organization—to develop the system and procedures for the administrative review of State operations and to analyze the results of these reviews in order to better assist the States with their problems.

3. The need to provide specialized help to the State agencies and to other rehabilitation organizations on the technical problems which arise in providing services for the more severely disabled. As more of the chronically ill, the older disabled, those with cerebral palsy and other neurological disabilities are accepted for rehabilitation services by the State agencies, and as the use of sheltered workshops, rehabilitation centers, and other specialized facilities grow, the problems of how to adapt rehabilitation techniques to provide adequate services for these severely disabled groups become more acute. Four additional positions are needed to meet the requirements in these areas.

4. The growing State programs are increasing the workloads and responsibilities of headquarters staff engaged in the collection and analyses of the State statistical reports, the development of explanatory materials relating to the program, and the provision of technical consultation to the States on fiscal matters. Five additional positions are needed for these activities.

HOUSE ACTION

Miss SWITZER. We have had a very rewarding year.

The statement contains a great deal of information about what we have done during the year. As you know, the House committee and the House allowed the full amount of the President's budget—the full amount that we felt was needed.

Senator HILL. They did not reduce you in any item at all?

Miss SWITZER. Not at all.

The Budget Bureau likewise acceded to the Secretary's request for the full amount, so that we feel full recognition has been given to the program.

Senator HILL. In other words, the Budget Bureau granted the full amount that the Department asked for?

Miss SWITZER. That is right.

Senator HILL. And the House has put that amount in the bill?

PRINCIPLE OF PROGRAM RECOGNIZED

Miss SWITZER. That is right. We feel that recognition has been given to the established principle that this program go forward as fast as it can to accomplish its mission, which is to have available the services to rehabilitate all of our disabled people.

THREE-PART PROGRAM

Now, as you know, the program is chiefly in three parts: In our State-Federal program, grants to States, research and demonstrations, and training and traineeship, we find each year the very encouraging and exciting demonstration that more and more States are taking full advantage of our law and the device initiated during the early years of the program, the use of an allotment base so that the money appropriated will be as close as we can estimate to the actual needs of the States.

I think that each year the States are finding new and better ways of utilizing their funds for rehabilitating the disabled, of planning

statewide rehabilitation facilities, and assisting in supplementing other units of State government in serving the disabled. This is very well illustrated in various developments in your own State of Alabama in the last couple of years. In Wisconsin and in Minnesota, to mention two other States, they have combined Hill-Burton money with OVR project grants and section 2 funds to round out the facilities to meet the medical needs in rehabilitation.

The research program is very exciting and I wish that you could have seen, because of your own great interest in prosthetics, a demonstration that our National Advisory Council had last week when they held their spring meeting.

HEIDELBERG ARM

You remember that I indicated last year that one of the new developments in prosthetic appliances was the Heidelberg arm. We talked about this before your committee considering the international health bill.

We made a grant for this purpose to the Institution for the Crippled and Disabled in New York which, with Dr. Kessler's help, has been working on this. I wish you could have seen the young boy who came down the other day. He was born without legs or arms, a perfectly darling boy. He was fitted to the double shoulder prosthesis with a very comfortable corsetlike attachment which provided an underarm device for the release of gas through a little valve so that he could manipulate a 50-cent piece from one hand to another.

You would just be thrilled to see it. This is illustrative of the kind of work going on in the field of prosthetics.

We have more than a half-million dollars committed for this year to that field.

We have three or four of the most interesting and creative workers in this field, both in medicine and engineering. Prosthetics is one area that we feel very good about.

WORK ON MENTAL RETARDATION AND BLINDNESS

Another area is the general field of mental retardation, where, as a result of our demonstration projects of the ways in which vocational adaptations can be made to the adult group, we have been able to increase our progress all over the country. We have accomplished a great deal in the field of work for the blind, particularly in the Southeast, where we have done a good deal in developing agricultural pursuits for the blind, such as in Talladega, Ala.

Senator HILL. Is that our Institution for the Blind at Talladega?

Miss SWITZER. Yes. Through their coordinating the services of the agricultural programs, two blind persons purchased farms. The records show these are the first farms purchased by civilian blind persons in the United States through loans by the Farmers' Home Administration.

Senator HILL. That is most interesting.

Miss SWITZER. I think that is the type of results we are beginning to get now that these projects have been going on for the past 4 years.

WORK WITH ILEOSTOMY PATIENTS

Another interesting thing happened in Boston as a result of a project which was really very modest in its scope. It came from a group of people who had had the radical ileostomy operation, the kind that many people have with the external opening requiring a very complicated prosthesis. This group from Boston was working with the Massachusetts General Hospital on a program of presurgery vocational and social adjustment to get the patients better accommodated to their prosthetic device needs.

An engineer at MIT, holding one of their most important chairs, became interested in the problem because he had promised a friend of his in England that he would develop something better than anything yet available. He is a materials expert. They now have in production and are testing something that might revolutionize this whole field. This could have a bearing on other aspects of our program, and also on cancer, and other problems. It could be far reaching in terms of comfort and surgical satisfaction.

This is the sort of thing that makes it quite interesting to see how one development leads to another.

WORK WITH DEAFNESS

I think we are anxious to emphasize certain things next year, such as the medical aspects of our program, and work with the deaf.

Senator HILL. What are you doing with that? I have felt that we have been very slow about that.

Miss SWITZER. That presents some problems.

I think deafness is almost the single most disabling condition that one can have.

Senator HILL. Statistics show how many people have at least some partial deafness.

Miss SWITZER. And the problem is complicated, I think, by conflict of philosophies in their education.

There has been a tendency on the part of many to feel that they have to be isolated. It is like the blind were a generation ago. We are now learning every day more ways of getting at deaf children very early. This is one of the encouraging things that I think will bear fruit perhaps 5 years from now.

The Commissioner of Education mentioned a little program—captioning of films for the deaf—included in their bill which was passed last year but has not been activated yet.

I hope you will keep your eye on the education budget and see that they are provided staff for this very beneficial program. It would bring the deaf into the community and help them work with the hearing people to get this program of captioned films underway.

I think also that we are learning more ways of educating the deaf in a normal setting by concentrating on communication and language improvement in the high school and immediate post-high-school age. This may make it possible for deaf people to go to regular colleges and to take conventional courses better suited for their integration in the community.

I think we are also learning the importance of the hearing aid to deafness. This is something that needs the same type of collaboration

that we now find in prosthetics—the working together of the engineer, the physicist, and the electronics expert, as well as the otolaryngologist and persons skilled in working with the deaf.

Then we need to develop better ways of providing services to the disabled. We used to be a small program and everything was individualized.

TOTAL REHABILITATED

Last year we rehabilitated about 75,000 people. We hope this year to have over 80,000 and next year 90,000.

When you get to 100,000 finished rehabilitations you have maybe 500,000 people that you are dealing with in a year.

We need to study and experiment and constantly try to find better ways of furnishing services.

Perhaps we have to consider a clinic approach, the team approach, as it is called, in some places. Maybe we have to experiment that way so that our research and training programs combined are addressing themselves to this type of problem.

GROWTH OF PROGRAM

Of course, we have scarcity of personnel in all areas but, as fast as we can encourage people to go into the rehabilitation field and as fast as we can get institutions to cooperate with us, we shall be able to increase our supply of skilled people, especially the dedicated ones.

You will remember that 2 years ago we embarked on a speech and hearing program. We have great enthusiasm from this group. This has been one of the really exciting developments of the last 18 months.

In medicine, likewise, we have 145 doctors studying the speciality of physical medicine. We started out with only four.

Senator HILL. I remember that.

Miss SWITZER. Even now we have some vacancies but it is not a matter of money because we have the money if we can find the people. We will need constantly to increase the supply of physical and occupational therapists and to have adequate courses established in the various universities. We have very encouraging developments here, too. The University of Florida, for example, which started from scratch to build its medical school, now has a combined health-services scheme of education.

We are hoping that we can get the same thing into a number of other centers so that all people who deal with disabled people will be getting a common core of knowledge all at once.

AMOUNT REQUESTED

I think we need people in our own office who must service our programs. It is not a good investment to have the responsibility for \$12,500,000 for research and training, as we will have in 1960 if you comply with our request, and not have it adequately serviced.

Senator HILL. That gives you quite an enlargement over this year, does it not?

Miss SWITZER. In research it gives us \$1,700,000, and in training \$1,400,000, and this year we took the research program out of the grants to States and combined it with training.

Senator HILL. That is the reason your figures are a little different.

Miss SWITZER. Yes. This shows an increase that is really technical rather than otherwise so that it is about the same rate of increase that we have been having in other years.

MAIN INCREASES

Our salaries and expenses are requested to service that increase. For example, our main increases are in the programs that have to do with research and demonstrations and training and traineeships. Those are the ones that I think will give you an idea of where we plan to put our new people. We continue to need, of course, specialized service to States and the increase is to help the States with their administrative and other problems.

Senator HILL. How many new people do you expect to have?

Miss SWITZER. If we got everything that we asked for we would have an increase of 25 people over what we now have and they would be divided between the headquarters and the field, but the field has done pretty well in the last couple of years.

Senator HILL. How many people do you have altogether?

Mr. MARTZ. 166.

Miss SWITZER. And we are asking for 25 additional. That would be the minimum if we could get them.

I think I have made most of the points that I would like to make, Mr. Chairman, in view of the fact that you have many other people to hear.

Unless you have some questions, I would like to rest my statement at that point.

Senator HILL. Do you feel reasonably well satisfied with the budget allowance and the action of the House?

Miss SWITZER. Yes, I feel very satisfied. I feel satisfied with the amount but I think I feel even more satisfied with the fact that our program has continued to merit the confidence of everybody all along the line.

Senator HILL. And you have been able to continue to enlarge the programs and enlarge your services?

Miss SWITZER. Just as fast as is humanly possible to increase and improve what we are doing.

Senator HILL. You have made a most interesting statement.

As you recall, we had a rehabilitation conference in my home city of Montgomery last fall.

Miss SWITZER. Yes.

MOVIE OF HUGHES PLANT

Senator HILL. We had a moving picture there which I am sure you have seen of the rehabilitated people who now work for Hughes.

Miss SWITZER. Yes. Is that not a beautiful movie?

Senator HILL. I wish it were possible for everybody in the United States to see that picture because it shows the possibilities.

Miss SWITZER. You have never visited that plant, have you?

Senator HILL. No.

Miss SWITZER. You must do that sometime because that is one of the most thrilling sights, really, of this country. They have this tremendous loft-type building, the old Nash assembly plant, and from

a balcony, one can look down and see all these people working at benches and they—the disabled and the nondisabled—are all mixed in, they are not separated. Some of the disabled moving around in wheelchairs, others are blind, and some are the most severe epileptics and victims of cerebral palsy that I have seen working anywhere.

It is a very thrilling sight to see.

You must not miss it the next time you are out in that part of the country.

Senator HILL. You have observed that often where the person is denied the function of some part of his body, maybe his eyes or ears, that some other function is strengthened.

Miss SWITZER. It seems to be that way.

The thing that amazes me the most is to see blind people handle high-powered production tools; to me that almost seems the most miraculous thing that people can be trained to do.

Yet they do it with a safety record that is far more favorable than sighted people under the same conditions. It is amazing.

Senator HILL. I recall that one person who interested me so much in the picture at the Hughes plant was that fellow that had no arms. He had nothing to hold papers but he had a brilliant mind. He could look at the paper and give an answer just like that. That was where brain power was worth more than arm power.

Mr. KELLY. We need him as a witness.

Senator HILL. You have such a brilliant witness in Miss Switzer that I don't think you need any other witnesses.

Miss SWITZER. Mr. Chairman, you embarrass me.

Senator HILL. One of our broadcasting systems would be well justified in putting on that picture and letting Americans see that picture.

Miss SWITZER. Yes, because it is a beautiful story and is so well done.

EXAMPLES OF WORK POSSIBLE

Senator HILL. So many people who in the old days would be what we might call "lost souls" now have had it made possible to find their place in the world.

Miss SWITZER. I thought of that little boy without arms and I remember that last week one of our friends from Florida was telling about a blind man who had bulbar polio and was absolutely paralyzed and only had just the remotest function left in his fingers. He was telling how the telephone company and General Electric together made him a sensitive telephone instrument so that he could run a telephone business.

I cannot begin to tell you the money he is making, but it is plenty.

This is the type of case that we could not have done anything for 10 years ago. It would have been just impossible.

That is the most delightful and heartwarming aspect of the work.

Every year opens up vistas that we just never dreamed were possible before.

You have come from a medical family and know the history of medicine in America.

Senator HILL. That is why it is so important that we keep the program moving forward. We must never lose this momentum.

Miss SWITZER. When are we going to have the international health bill through?

Senator HILL. The Committee on Labor and Public Welfare has ordered the bill reported to the Senate and I would be working on the report now but for the fact that I have been here all day.

I think we will pass that bill very shortly.

Miss SWITZER. Dr. Rusk is going to get the Good Will Award tonight.

Senator HILL. He certainly richly deserves it. He is a wonderful man. I know he is an inspiration to all of us.

Miss SWITZER. Dr. Rusk is a pillar of strength to the rehabilitation program and to the Office of Vocational Rehabilitation.

I know you were pleased the other day at luncheon but I thought that he was just perfect.

Senator HILL. Of course, I admit now that I was very prejudiced in his favor.

As a witness, I am subject to impeachment but I must say that I thought he did as artistic and beautiful a job as I have ever seen done in my life.

Miss SWITZER. Of course, never let it be said that he is not fully informed and I thought that one of the most delightful things was when he started out by thanking you on behalf of his small town.

Mr. KELLY. I also thought that poem he read was beautiful. I have sent for it. I would like to have it.

Miss SWITZER. Some of the people at the institute said they are getting tired of hearing it but I said you could not hear it too often.

He is our chief medical consultant, you know, and we are about to establish a Medical Advisory Committee, and he has agreed to take the chairmanship of it.

Senator HILL. With him as chairman, the success of that committee is assured.

Miss SWITZER. We can agree on that.

Senator HILL. We surely can.

In his clinic in New York, he has this poem framed so that I suggest you have it framed, particularly for the benefit of these budget people.

Miss SWITZER. An excellent suggestion. We will make Mr. Kelly a present of it.

Senator HILL. I will promise myself that the next time he comes here, I will ask him to recite it.

Is there anything else you would like to add?

Miss SWITZER. Not a thing, except thank you from the bottom of my heart for your support.

Senator HILL. You have made a very fine statement.

Miss SWITZER. It is easy to testify before you, Senator Hill.

Senator HILL. You are always so brilliant.

Thank all of you very, very much.

COMMITTEE RECESS

The committee will stand in recess until 10 o'clock in the morning when we will have the Public Health Service as our first witness.

(Whereupon, at 3 p.m., Monday, May 4, 1959, the committee recessed until 10 a.m., Tuesday, May 5, 1959.)

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION,
AND WELFARE APPROPRIATIONS FOR 1960

TUESDAY, MAY 5, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room F-82, the Capitol, Hon. Lister Hill, chairman of the subcommittee, presiding.

Present: Senators Hill, Monroney, Bible, and Smith.

DEPARTMENT OF HEALTH, EDUCATION, AND
WELFARE

PUBLIC HEALTH SERVICE

STATEMENT OF DR. LEROY E. BURNEY, SURGEON GENERAL; ACCOMPANIED BY DR. JOHN D. PORTERFIELD, DEPUTY SURGEON GENERAL; DR. DAVID E. PRICE, CHIEF, BUREAU OF STATE SERVICES; DR. JAMES V. LOWRY, CHIEF, BUREAU OF MEDICAL SERVICES; DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; STEPHEN J. ACKERMAN, FINANCIAL MANAGEMENT OFFICER; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

TABLE CITING DEATHS FROM PRINCIPAL CAUSES

Senator HILL. The committee will kindly come to order.

We are very happy to have with us this morning the Surgeon General of the U.S. Public Health Service, Dr. Leroy E. Burney.

We welcome you, Doctor, and will be happy now to have you proceed in your own way.

I shall place in the record the table titled "Deaths From Principal Causes" which is supplied the committee each year by the Public Health Service.

(The table referred to follows:)

Deaths from principal causes: United States, 1952-58 (includes only deaths occurring within the continental United States, excludes fetal deaths)

Cause of death	January-December 1958 (estimated) ¹	1957 (final)	1956 (final)	1955 (final)	1954 (final)	1953 (final)	1952 (final)
All causes.....	1, 636, 470	1, 633, 128	1, 564, 476	1, 528, 717	1, 481, 091	1, 517, 541	1, 496, 838
Tuberculosis, all forms.....	11, 950	13, 324	14, 061	14, 940	16, 392	19, 544	24, 621
Malignant neoplasma, including neoplasma of lymphatic and hematopoietic tissues.....	251, 670	253, 183	247, 357	240, 681	234, 669	229, 079	223, 277
Diabetes mellitus.....	26, 390	27, 180	26, 184	25, 488	25, 151	25, 796	25, 474
Diseases of cardiovascular system.....	887, 480	876, 793	838, 848	815, 532	781, 018	795, 888	776, 114
Vascular lesions affecting central nervous system.....	190, 910	187, 709	177, 845	174, 142	167, 777	169, 800	166, 331
Diseases of heart.....	629, 720	628, 504	602, 995	584, 620	560, 077	570, 275	555, 141
General arteriosclerosis.....	34, 390	33, 272	32, 018	32, 486	30, 225	32, 351	31, 685
Other diseases of cardiovascular system.....	32, 460	27, 308	25, 990	24, 284	22, 939	23, 462	22, 957
Chronic and unspecified nephritis and other renal sclerosis.....	13, 600	15, 032	15, 304	15, 821	17, 073	18, 774	20, 757
Influenza and pneumonia, except pneumonia of newborn.....	57, 030	61, 001	47, 103	44, 510	40, 991	52, 238	46, 265
Cirrhosis of liver.....	18, 260	19, 317	17, 924	16, 763	16, 201	16, 399	15, 934
Congenital malformations.....	20, 670	21, 818	21, 065	20, 502	20, 081	20, 012	19, 768
Certain diseases of early infancy.....	68, 950	66, 569	64, 546	64, 043	63, 486	63, 444	63, 659
Accidents.....	90, 610	95, 307	94, 780	93, 443	90, 032	95, 032	96, 172
Motor-vehicle accidents.....	37, 070	38, 702	39, 628	38, 426	35, 586	37, 955	37, 794
All other accidents.....	53, 540	56, 605	55, 152	55, 017	54, 446	57, 077	58, 378
Suicide.....	17, 840	16, 632	16, 727	16, 760	16, 356	15, 947	15, 567
All other causes.....	172, 020	166, 972	160, 577	160, 234	159, 641	165, 388	169, 230

¹ Data for 1958 are based on a 10-percent sample of death certificates.

TRIBUTES BY SURGEON GENERAL

Dr. BURNEY. Mr. Chairman and members of the committee, may I digress from my statement for just two points. One is, I would like to say that all of us in the Public Health Service share, with his colleagues in the Senate, the warm feeling of satisfaction in the chairman of this committee, Senator Hill, receiving the first Elk Award, United States of America, which was given to him approximately a week ago, and join, with his colleagues in the Senate, in saying this was a well-justified, well-merited award.

Senator HILL. Thank you. That is most gracious and generous of you and I assure you I deeply appreciate it. Thank you, sir.

Dr. BURNEY. The other point I wish to comment on, Mr. Chairman, is this: Knowing of your very warm regard for Mr. Harlow, I regret to say that Mr. Harlow, after 40 years of service in the Government, 34 years of which have been with the U.S. Public Health Service, is retiring as of June 30 of this year.

In fact, he would have preferred leaving a little bit earlier, but at my request, knowing how invaluable he is with your committee, sir, he has been persuaded to stay on until June 30.

I would like to say, having known Mr. Harlow for most of my service career, that he is one of the finest examples, I think, of a public servant in the Government service. I have not known of anyone who has had the loyalty and high regard for the service that he has, and

in addition to being a very excellent person in his position he has set an example to all of the young officers and the young staff who have worked with him throughout these years.

I wanted to express before you and your committee our inadequate thanks and appreciation to a fine public servant who has done an extremely able job for his Government.

Senator HILL. General, I am glad to hear you pay this tribute to Mr. Harlow. I must admit my partiality to him because he comes from Alabama, but I will say this, that in the years that I have been on this committee no man has been more helpful, more cooperative or has done more to advance the work of this committee than Mr. Harlow; and all that you say about him is certainly true: He has been a very fine, dedicated, outstanding public servant. My only regret is that a man like Mr. Harlow must retire.

We shall certainly miss you, Mr. Harlow.

RESPONSE BY FINANCE OFFICER

Mr. HARLOW. Well, Senator, I would be most ungrateful if I did not say that I very much appreciated the statement of the Surgeon General and also yours. I am quite embarrassed, however, because, as I look back on my career, I can see that there were occasions when I might have done more than I have done to advance the cause of the Public Health Service in this country.

I think perhaps you may have had somewhat the same feeling when you were receiving such great honors the other day; you were very glad to know that your colleagues and the representatives of the people thought very highly of you, but perhaps you felt that there might have been some other things you could have done that you had not done.

I know that is true in my case, Senator.

Senator HILL. I am sure we all have that feeling, Mr. Harlow, but your record stands as one most outstanding in the many fine, fine contributions that you have made to the Public Health Service and in your great cooperation and helpfulness to this committee in its work, and we will be eternally grateful to you.

When you leave we certainly wish you all the happiness in the world.

Mr. HARLOW. Thank you very much.

STATEMENT OF SURGEON GENERAL

Dr. BURNEY. Mr. Chairman and members of the committee, in reporting to this distinguished committee with its profound knowledge of our Public Health Service responsibilities, I wish first to highlight the problems with which we are dealing and then give you an account of our programs during the fiscal year 1959 and of our plans for 1960.

HEALTH PROBLEMS

The major health problems which confront the American people today are of two kinds:

First, the diseases, injuries, and harmful exposures which directly affect their physical, mental, and social well-being; and

Second, the availability of scientific means, health manpower and facilities, and well-organized services of high quality to combat those threats to life and health.

The Congress has recognized this dual nature of the Nation's health problems by its consistent support of Public Health Service programs designed to augment the national effort in research, training of manpower, construction of facilities, and provision of organized health services.

EVALUATION OF FEDERAL SUPPORT

Federal support has stimulated advances in each of these areas. Despite the Nation's progress in meeting these needs, the problems directly affecting the health of the people have grown in magnitude and complexity.

In some respects the record is good. Our general death rate is still well below 10 per 1,000 population, the provisional rate for 1958 being 9.5 per 1,000—a slight decrease from 1957.

Although we do not have figures for the same years from other countries, the United States remains in the upper third of western nations with respect to general death rates. Our birth rate declined slightly in 1958, but the number of live births—4.25 million—in that year was the second highest in the Nation's history.

Heart disease, cancer, and accidents continue to be major causes of death in all age groups from 5 years onward. Also in 1958 there was a slight rise in infant mortality to 26.9 deaths per 1,000 live births.

The National Health Survey, established by Congress in 1956, is paying good dividends. Its first full-year report provides much-needed data on illness and disability.

Senator HILL. That is the first report we have had since the WPA's days.

Dr. BURNEY. Yes, sir; 1935-36.

NATIONAL HEALTH SURVEY

For example, the Survey showed that in 12 months, the average civilian not in institutions experienced 20 days of disability. Circulatory diseases led among chronic conditions as causes of prolonged ill health, but digestive and rheumatic diseases were not far behind. Acute illnesses also accounted for large amounts of lost time from work, school, and other usual activities.

Evidence is accumulating on the adverse effects of various factors in the man-made environment of today. We do not have precise information on each and every exposure; but we know that the Nation is far behind in controlling water pollution, air pollution, and exposure of the general population to ionizing radiation.

In sum, chronic diseases, accidents, unconquered infections, and harmful exposures are the main problems which directly affect the health of the people. With a rapidly increasing population, coupled with striking changes in its distribution, the Nation has a formidable task to keep pace with health needs and to find effective solutions for these problems.

The increasing urbanization and industrialization of our society, for example, point to the need for new approaches to the study of human communities interacting with contemporary environments.

ENVIRONMENTAL RESEARCH

New physical, chemical, psychological, and social factors in the environment must be studied in relation to their effects on biological factors.

It would appear that coordinated research is essential if we are to have effective methods for the protection and improvement of human life in the modern metropolitan complex.

The Public Health Service is conducting research on some of these environmental problems, including radiological and occupational health, at its facilities in Cincinnati.

Our Sanitary Engineering Center and Occupational Health Laboratory there also provide technical assistance and specialized training in some of these fields.

We are now planning to coordinate and expand these programs to form an Environmental Health Center where research in the physical, chemical, and engineering sciences can be integrated with biological, medical, and behavioral research on these growing problems.

As we gain experience with the development of this new concept, it is possible that we shall need the cooperation of existing non-Federal institutions in the further expansion of coordinated research on environment and health.

The funds available to the Public Health Service in the fiscal year 1959 enabled us to contribute substantially to national progress both in research and in application of science to problems of human health.

PROGRAM ACCOMPLISHMENTS

I wish now to give you an account of program accomplishments during the current fiscal year, and indicate some of our specific plans for next year. Awards and honors were bestowed on many members of the Public Health Service during the past year. For the committee's information, I have attached a list of these symbols of accomplishment.

Senator HILL. We will be happy to have that list in the record.

Dr. BURNEY. Thank you, sir.

(The list referred to follows:)

AWARDS AND HONORS TO PHS PERSONNEL BY NON-FEDERAL ORGANIZATIONS,
CALENDAR YEAR 1958 AND JANUARY 1959

NATIONAL INSTITUTES OF HEALTH

Anfinsen, Christian B., NHI: Guggenheim Fellowship to conduct research on ribonuclease.

Bodenstein, Dietrich H. F. A., NHI: Elected to the National Academy of Sciences for scientific achievement in identification of the hormone which controls insect development from the larval to the adult stage, and related research.

Field, James B., NIAMD: The 1958 Lilly Award of \$1,000 for outstanding research on insulin antagonism in diabetic acidosis.

Greenstein, Jesse P., NCI (deceased February 1959): The 1957 Hillebrand Prize, Washington Section of the American Chemical Society, for outstanding contributions to the biochemistry of cancer.

Hertz, Roy, NCI: The Anne Frankel Rosenthal Memorial Award of \$1,000, American Association for the Advancement of Science for studies on vitamin-hormone interrelations in control of growths of the uterus.

Lillie, Ralph D., NIAMD: The first sustaining membership award, with \$500 and scroll, Association of Military Surgeons of the United States, for accomplishments in histochemistry.

- Nirenberg, Marshall W., NIAMD: The Minnie Cukela Memorial Grant of \$4,000, American Cancer Society, to continue studies on the mechanism of action of epinephrine and the enzymatic defect in ascites tumor cells.
- Sjoerdsma, Albert, NHI: The Theobald Smith Award in Medical Sciences (\$1,000 with medal) of the American Association for the Advancement of Science, for outstanding research on malignant carcinoid and catechol amines.
- Vestermark, Seymour D., NIMH (deceased February 1959): Citation for outstanding services to psychiatry, American Psychiatric Association.
- Wittkop, Bernhard, NIAMD: The 1958 Hillebrand Prize, Washington section of the American Chemical Society, for work on oxidation mechanisms and labile metabolic intermediates.

BUREAU OF STATE SERVICES

- Bloomfield, John J., Institute of Inter-American Affairs: The 1958 annual award of the American Industrial Hygiene Association, for development of industrial hygiene programs in the United States and in Latin America.
- Borches, Joseph H., CDC: Citation as "Civil Servant of the Year, 1958," by the Atlanta Federal Personnel Advisory Council, for his contributions to international relations through training and orientation of foreign exchange students in the U.S.A.
- Jensen, Keith E., CDC: Citation as one of the 10 outstanding young men of 1957, by U.S. Junior Chamber of Commerce, for his research on influenza viruses, including the Asian strain.
- Kramer, Harry P., SEC: Citation as "Civil Servant of the Year, 1957," by Federal Business Association of Greater Cincinnati, for technical training and development of a laboratory reference service for 25 States in the field of sanitary engineering.
- Moore, W. Allan, SEC: The 1957 Bartow Award, sanitation division of the American Chemical Society, for his paper on "The Determination of Chlorine Dioxide in Treated Surface Waters."
- Murray, Lorena J., GHS: Wayne State Universal Alumni Award, 1958, for her services as military officer, university teacher, and nursing consultant.
- Rikli, Arthur E., and McDonough, John R., SHS: The annual merit award of the Chicago Heart Association for development of a rheumatic fever preventive program in that city.
- Steele, James H., CDC: The Michigan State University Alumni Award, 1958, for distinguished service, for his contributions to the advancement of veterinary public health.
- Terrill, James G., DRH, Rechen, Henry J., DRH, Pecsok, Donald A., SEC: Citation by the Federal Government of Germany for the conduct of seminars on radioactivity and water in West Germany.
- Walton, Graham, SEC: Citation by the water purification division of the American Water Works Association as author of the best paper on water purification in 1956.

Exhibits

- "Climate and Fluoridation," by the Division of Dental Public Health. Certificate of Honor, American Dental Association; Certificate of Merit, American Public Health Association. The DPH also cited by the University of Kansas City School of Dentistry.
- "Strike Back at Stroke," by the Division of Special Health Services (Paul Q. Peterson, Seymour Promrinse, and Bernard Daitz). Honorable mention, American Medical Association.

BUREAU OF MEDICAL SERVICES

- Pelton, Walter J., DDR: Elected to Board of Regents, American College of Dentists, 1958.
- Ross, Sister Hilary, Carville PHS Hospital: The Damian-Dutton Award of 1958 for her scientific and humanitarian services to persons suffering from leprosy.

RESEARCH IN THE HEALTH SCIENCES

Dr. BURNEY. During the past year, a Division of General Medical Sciences was established in the National Institutes of Health to deal with the increasing problems of research and training in fundamental

and clinical fields not readily absorbed by the programs of the categorical institutes. This Division also has responsibility for coordinating research on the processes of aging.

I shall mention only a few projects to highlight research progress. In this connection, let me note that the most important research in a given year is not necessarily a completed task. The first tentative findings in a study of the fundamental life processes, the planning and launching of a large-scale, long-range cooperative study, the moving of an experimental finding into clinical trial: any of these is an accomplishment, and in the long run may be of greater value than the addition of one more miracle drug or one more new diagnostic test.

IDENTIFICATION OF POLYOMA VIRUS

About 2 years ago scientists at the National Institutes of Health identified an agent, now called the polyoma virus, which induced a cancer in hamsters.

In the past year, they carried their studies forward to evolve an immunization procedure which prevents the development of this experimental cancer.

The National Cancer Institute also has expanded basic research on viruses as possible factors in the causation of cancer, through special, long-term grants to some 20 institutions in this country and abroad.

NEW DRUG DISCOVERIES

A new drug, known as NIH 7519, which required one-tenth the dosage of morphine to relieve pain, has been synthesized at the National Institute of Arthritis and Metabolic Diseases. Its addictive liability is under study at our Addiction Research Center in Lexington, Ky.

The National Heart Institute has found that a new drug, known as JB-516, is remarkably effective in lowering high blood pressure, without the undesirable effects of other drugs currently in use.

The National Institute of Mental Health reports that a new energizer has shown much promise as a safe specific treatment for mental depression.

The Cancer Chemotherapy National Service Center is in full operation, with 40,000 materials entering the primary screening process each year, and 105 contracts valued at \$16 million in effect.

STUDIES ON AUTOMOBILE EXHAUST

Preliminary research in analytic methods and instrumentation at the Sanitary Engineering Center culminated this past year with the installation of a specialized laboratory for physical, chemical, engineering, and biological studies on automobile exhaust.

We shall be able to operate standard automobile engines under conditions simulating the natural environment, particularly with respect to sunlight irradiation. A program of studies has been designed and some of them are underway in this new laboratory which, in itself, is a product of research. We hope to increase our work on automobile exhaust in the coming year.

VALUE OF NEW DIAGNOSTIC TECHNIQUE

The fluorescent antibody technique for the rapid diagnosis of infectious diseases has been under intensive study at the Communicable Disease Center throughout the year. Our staff has had considerable success in adapting the technique to at least 20 disease-causing organisms, and has begun work on some 30 others. Since there are upward of 1,500 organisms known to be pathogenic in man, our research workers have a big job ahead.

We are most enthusiastic about the preliminary results of field trials, which are in progress in six States where the technique is being applied to rabies or to streptococcal infections.

In rabies, the technique has the great value of determining whether or not a suspected animal is rabid within a few hours, as contrasted with the 10 days to 2 weeks required with conventional methods. This speedy diagnosis will spare many individuals the discomfort and hazards of taking the course of treatments with antirabies vaccine following exposure to a suspected animal.

Senator HILL. In other words, the parents will not have to go through that ordeal any more?

Dr. BURNEY. That is quite true. That is quite an ordeal for a parent to go through.

Up to now, it has been necessary in many cases to start treatment without waiting for laboratory diagnosis.

In streptococcal diseases, the fluorescent antibody technique has two important values. It will prevent unnecessary dosage with antibiotics if the patient's infection is not amenable to such therapy. If the disease is streptococcal, the physician can prevent rheumatic fever by prompt, adequate therapy.

INSTITUTIONAL RESEARCH GRANTS

One of the major recommendations of the Bayne-Jones report was the establishment of a system of institutional research grants in the National Institutes of Health. The Public Health Service is developing a legislative proposal for the implementation of this recommendation. Under this proposal, grants would be awarded to educational and other research institutions for the general support of their research and research training programs, without specifying the activities to be undertaken with these funds.

We believe that grants of this type would enable educational institutions to provide more stable career support for their scientific investigators, as well as to encourage beginners in medical research.

Moreover, the plan would be of great assistance in reducing the number of small research grants with which the NIH and our councils must deal every year, at the same time increasing the effective use of these funds. We feel that the institutions themselves are better able to determine the balance of their programs and to evaluate the competency of individual investigators.

I am sure that Dr. Shannon will want to enlarge upon this statement, Mr. Chairman and members of the committee.

MANPOWER AND TRAINING

There are shortages of well-qualified personnel in every field related to human health, from research scientists and teachers to laboratory

technicians. Although some shortages are less acute than others, the outlook for meeting the needs of a growing population at present rates of production is discouraging.

Public Health Service manpower studies and our programs in aid to training of certain categories of personnel indicate that substantial expansion of professional education is urgently needed merely to maintain the present inadequate ratios of health personnel to population.

SHORTAGE OF PHYSICIANS

By 1975, for example, we need to graduate 3,000 more physicians per year than our existing institutions are graduating at the present time.

Senator HILL. How many graduates are there now, Doctor?

Dr. BURNEY. Approximately 7,500, Mr. Chairman, 750 foreign graduates are licensed each year in the United States. In other words, that makes approximately 8,200 physicians.

Senator HILL. That increase would be a great increase, would it not?

Dr. BURNEY. Yes, sir. That would include, Mr. Chairman, the potentialities of existing schools to expand a certain amount to allow for a few more graduates, possibly a thousand.

Senator HILL. There are about 71 of these schools?

Dr. BURNEY. No, sir, I think 84 full 4-year schools, but it would also require approximately 15 to 20 new medical schools.

Senator HILL. To get the addition of 3 thousand?

Dr. BURNEY. Yes, sir.

Senator HILL. What are the prospects today for those other schools?

NEW MEDICAL SCHOOLS

Dr. BURNEY. Well, let me say it this way: We know of no interests at the present time in any university or group starting a new medical school. There have been four fairly recent additions.

The University of Kentucky is just completing a 4-year school. The University of Miami has just completed a 4-year school.

Seton Hall up in New Jersey is now in full operation and there is one other medical school. There are four that have been completed in the last 3 or 4 years.

Senator HILL. Starting a medical school is a pretty expensive proposition.

Dr. BURNEY. If the teaching hospital is included along with the academic and laboratory school buildings, the average cost, based upon what information we have from these new schools in Kentucky and Florida, runs from \$15 million to \$18 million on the physical plant.

If one takes a teaching hospital away, then you come down to perhaps \$8 million.

Senator HILL. But you need that teaching hospital, do you not?

Dr. BURNEY. Yes, sir, and it costs, on the average, \$2.5 to \$3 million a year to operate a medical school; possibly the most expensive item in the teaching process we have at the present time.

Dr. Shannon, am I right in my estimate of the cost?

COST OF SCHOOL

Dr. SHANNON. I think, if we include the teaching hospital, together with enough appliances that will insure the initial operation, that depending upon the size and complexity and whether it is a school itself or contained within a university, that cost could be as low as \$25 million and could be as high as \$50 million.

Senator HILL. Mr. Downey suggested that the fourth school is Yeshiva University in New York.

Dr. BURNEY. That is right.

Senator BIBLE. I have one question, Mr. Chairman.

Senator HILL. All right, Senator.

TOTAL APPLICATIONS

Senator BIBLE. Doctor, how many applications from medical students, would-be medical students, are rejected each year by a medical university?

Dr. BURNEY. Senator, that is a little hard to state.

Senator BIBLE. Do you understand what I am asking?

Dr. BURNEY. Yes, sir; I understand what you are asking. The reason that it is hard to answer is because so many students will apply to maybe five to seven schools, on an average, and then they may take the first school that accepts them or they may take another one; but, on the average, it has been running about two and a half applicants per opening available.

Senator BIBLE. There are still plenty of college graduates that want to become doctors and cannot do so because there are not sufficient facilities, either manpower or space?

Dr. BURNEY. Yes, sir; but, if I may add, sir, we have a group, under the chairmanship of Mr. Frank Bane, looking into this matter of medical education. On that committee are a number of deans and some of these regional educational representatives such as Dr. Anderson from the Southern Regional Education Board and Dr. Enarson from the Western Interstate Commission on Higher Education and philanthropic organizations.

They have gone into this situation very carefully and the deans, almost without reservation, Senator, say they are running into very severe competition for good students from the engineering sciences, from chemistry and from physics, and that is because of the publicity and the drama attached to these physical sciences plus the long period of training necessary in medicine, which takes 4 years on the average of undergraduate and 4 years of graduate training and a year of internship, and then from 3 to 5 years of specialty. These all go to discourage the persons interested, and therefore the deans, almost without exception, state that in their opinion the quality of students applying for medicine whom they accept is not as good as it was 5 years ago, and they are really concerned about trying to compete with some of these other sciences for the best students.

Senator BIBLE. That is most interesting, but in addition to that do I understand you to say that of every one student admitted to a medical school there are one and a half not admitted?

Dr. BURNEY. That is right.

SCHOOLS OF PUBLIC HEALTH

Senator HILL. Doctor, is this manpower study including the public schools of health along with the medical schools?

Dr. BURNEY. No, sir. I asked them to determine the need for physicians and to make recommendations as to how the United States might meet this.

We will have something as to this, also, but we thought we should not bite off too large a section for a beginning study, but we hope that this will be followed with similar studies in the other manpower areas.

NEED FOR DENTISTS

Senator HILL. Do you have dental figures, such as you have just given us with reference to your need for physicians?

Dr. BURNEY. Yes, sir. I do have.

Senator HILL. Could you supply those for the record?

Dr. BURNEY. I will supply those for the record and will be pleased to do so.

(The information referred to follows:)

There are now 47 dental schools in the United States, graduating approximately 3,200 new dentists per year. The number of graduates will probably grow to about 3,500 within the next 5 years as new schools reach capacity and expansion now planned in a few existing schools takes place.

The supply of dentists has been declining relative to the population for more than a generation and to halt this trend 6,200 dentists must be graduated annually by 1975. Therefore, an additional school capacity capable of graduating another 2,700 dentists will be needed to meet the minimum needs associated with population growth.

Currently, there are slightly more than two applicants for every available freshman opening.

RESEARCH TRAINING PROGRAM

Senator HILL. All right, Doctor, you may continue.

Dr. BURNEY. The Public Health Service's research training programs are now providing assistance to 8,600 individuals for their advanced education as scientific investigators or clinical specialists.

Under the Health Amendments Act of 1956 our programs of postgraduate public health training and advanced nursing education have made a beginning in stimulating increased national effort in these fields.

State health departments reported, for example, a 25-percent increase in funds for academic training of their personnel in fiscal year 1958.

This year approximately 600 individuals are being trained in public health under title I, and about 2,000 nurses are being prepared for teaching and supervisory positions under title II.

As the committee is aware, the public health and nurse training programs expire at the close of this fiscal year. Our budget request for 1960, therefore, includes no funds for these programs, which accounted for \$8 million in our 1959 estimate.

The conferences on these two programs, as directed by the Congress, were held in the summer of 1958, and the reports have been submitted to the appropriate congressional committees. The recommendations vary according to the purpose of each program; but there was agreement in each instance that the program should be extended. Legisla-

tion extending the program is being considered by both Houses of Congress.

SUPPLEMENTAL REQUEST FOR TRAINING GRANT FUNDS

A supplemental appropriation of \$450,000 for 1959 to implement legislation enacted by the 85th Congress authorizing grants to graduate schools of public health has been passed by the House and is being considered by the Senate. Our 1960 estimate includes \$1 million for the same purpose.

During the past year about 5,000 individuals received intensive training in new techniques at the Communicable Disease Center and the Sanitary Engineering Center. Particular emphasis is laid on laboratory diagnosis, epidemiology, and the detection of dangerous substances in the environment, including radioactive materials.

NATIONAL RESOURCES FOR TRAINING

Other facilities of the Service also are national resources for the training of health personnel. The Division of Hospitals, the Indian health program, and the hospitals of the Bureau of Prisons, Department of Justice, operate 104 facilities which offer many opportunities for career development to young physicians, dentists, and nurses.

The lack of enough well-qualified physicians, dentists, research scientists, and other professional categories of personnel is probably the largest single impediment barring national health progress in all parts of the country.

Recognizing that our own programs can help meet only a fraction of the needs and in limited areas, the Public Health Service, nevertheless, is working with national leaders in medicine, medical education, and public affairs to develop some well-defined ideas concerning the total problem of medical manpower.

To this end, I have appointed a group of consultants under the chairmanship of Mr. Frank Bane, former executive secretary of the Council of State Governments. This group expects to present recommendations before the close of this fiscal year as guides to nationwide action for meeting medical manpower needs.

When I use the term "medical" I refer to "medical and dental." Perhaps a better word would be "health."

HEALTH FACILITIES

The Nation has made progress in the development of research facilities, hospitals and medical facilities, and municipal waste-treatment facilities. Construction grants programs of the Public Health Service has stimulated increased action in each of these fields.

Grants to 158 institutions have been approved this fiscal year for the construction of research facilities.

Since 1956, 495 such projects have been approved with double or better matching of funds on the part of the institutions.

GRANTS FOR FACILITIES

Between July 1, 1956, and December 31, 1958, a total of 1,337 grants for municipal waste-treatment facilities was approved in the amount of \$114 million for construction projects which will cost an estimated total of \$595 million when completed.

Senator HILL. Doctor, while you are speaking of these research facilities, could you give us a table or a statement showing the number of applications, the amount of funds requested, and how many of these applications you have been able to meet, and also the amount of money, non-Federal, that goes to these organizations?

Dr. BURNEY. I am sure we have that and can put it in the record. (The information referred to follows:)

GRANTS FOR CONSTRUCTION OF HEALTH RESEARCH FACILITIES

1. Total number and amount of grant applications, including supplementals and revisions, received as of May 1, 1959:

Number-----	739
Amount-----	\$207, 556, 120

2. Total number and amount of grant applications approved and financed as of May 1, 1959:

Number-----	496
Amount-----	\$90, 000, 000

3. Total estimated cost of entire facility for which grants were awarded (Federal and non-Federal):

Amount-----	\$498, 556, 830
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HOSPITAL PROJECTS APPROVED

Dr. BURNEY. Funds for construction grants have been available under the Hill-Burton program since fiscal year 1948. As of December 31, 1958, 4,315 hospital and medical facility projects had been approved in the 10-year period, at a total cost of \$3.6 billion, of which the Federal share was about \$1.1 billion.

In the same period, the Nation spent an additional \$5 billion for construction or renovation of hospital and medical facilities without Federal aid. The bulk of this combined \$8.6 billion expenditure has gone into hospital facilities.

Hospitals throughout the country are faced with critical problems which, in turn, affect individual patients, their families and communities, and the national economy.

In many areas, for example, the hospital plant is old or poorly located. The structures in a given community have not been kept up, uniformly, with advances in design, construction, materials, and equipment.

As a whole, hospitals are short of personnel. They are feeling the bite of inflation, especially in meeting the upward spiral of labor costs.

General hospitals are under the strain of accommodating classes of patients new to them, specifically patients requiring long-term care due to chronic diseases, and patients with mental disease or tuberculosis formerly cared for exclusively in special State institutions.

Moreover, the States and local communities have not gone as rapidly as they should in the provision of facilities other than the acute general hospital for the care of long-term and ambulatory patients.

I refer to such facilities as residential centers for the aged, nursing homes, rehabilitation centers, diagnostic and treatment facilities for ambulatory patients.

It is essential that planning for hospitals, other facilities, and community services take on new dimensions, both in scope and depth. In April 1959 the Public Health Service and the American Hospital

Association launched a series of regional conferences to develop principles for planning the future hospital system. The sponsoring agencies, along with many individual organizations and institutions, are convinced that such principles must be applied to ensure proper balance in the construction of facilities and effective utilization of scarce personnel.

NEEDS IN METROPOLITAN AREAS

The need is especially acute in metropolitan areas. In these areas the outward movement to the suburbs robs the central cities of a large proportion of their young middle and upper income families.

There is also movement of low income families into central residential areas which were formerly prosperous neighborhoods. Urban redevelopment and construction of superhighways also affect population movement.

These shifts drastically alter the potential market for each hospital in the central city. Thus, any planning for the renovation and modernization of old hospitals must take into account the wealth and size of each hospital's market in a rapidly changing socioeconomic environment.

The problems of duplication and accessibility must be considered. Rehabilitation of the metropolitan hospital plant must be accomplished with a minimum of destructive competition on the part of separate institutions for financial support.

HOSPITAL PLANNING

In connection with hospital planning, I should like to emphasize the need for increased research in the fields of hospital organization and administration. Our own small Public Health Service program accounts for a large proportion of the national effort in hospital research. The \$6 billion hospital business—one of the Nation's major enterprises—challenges other sources of support to increase the estimated total expenditure of \$3 million annually for research in this field.

PROGRESS IN NEW PUBLIC HEALTH PROGRAMS

In addition to the regional conferences on hospital planning, the Public Health Service has sponsored or participated in numerous conferences to stimulate nationwide action in new public health programs.

Last spring, I reported to this committee on the first national conference on nursing homes and homes for the aged held in February 1958.

Since that time, I have convened national conferences on hospital-acquired staphylococcal disease in September, and air pollution in November and two special conferences with State and Territorial health officers on the Indian health program and radiological health, respectively, both held early in April 1959.

The PHS also participated with other units of the Department and many voluntary agencies in a national conference on homemaker services in February 1959.

RECOMMENDATIONS OF NATIONAL CONFERENCES

In the national conferences, the recommendations went far beyond the statutory authorities and responsibilities of the PHS, providing

guides to action by other organizations throughout the country. In each instance, however, there were requests for increased assistance from the Public Health Service in research, consultation, training, and technical assistance. Our staffs are working to the limit of our resources in meeting these requests.

HOSPITAL-ACQUIRED INFECTIONS

The funds provided by the 85th Congress for this fiscal year, for example, have made possible an initial nationwide attack on hospital-acquired staphylococcal infections, spearheaded by the discussions and recommendations of the conference at the Communicable Disease Center.

Research on staphylococcal disease has been expanded in productive directions, based on a complete review of the national effort in this field made by NIH last May.

Fifty-three grant-supported projects, primarily aimed at the staphylococcal problem, are now underway, and our own research has been increased.

Senator HILL. Doctor, in that connection, do you think you have made some progress against this disease? I remember how much you were challenged last year and what an insidious disease this is and how it has built up an immunity to the antiseptic methods used in the past.

Dr. BURNEY. It is my impression, from talking to Dr. Anderson at the Communicable Disease Center that we have made progress, but, as an administrator and not a technician, I would have to rely on them for the data on that.

Senator HILL. All right, they will be here before us and we will get into that with them.

Dr. BURNEY. I have been pleased with what they told me of the progress.

Senator HILL. I remember so well the story we had last year and I am sure you do, Senator Smith, on this disease.

Now you go right ahead, Dr. Burney.

COMMUNICABLE DISEASE CENTER

Dr. BURNEY. The Communicable Disease Center is responsible for certain aspects of research and for the expansion of services which very few hospitals and communities can provide.

The center, for example, now operates the National Reference Center for staphylococcus phage typing, an indispensable service in the control of hospital infections and one which cannot be provided on a nationwide scale by the public spirited physician who initiated it at the Hospital for Joint Diseases in New York City.

The Communicable Disease Center also has prepared diagnostic reagents on a large scale for distribution to laboratories. Its Epidemic Intelligence Service is devoting much of its time to requests for help in hospital outbreaks. Training courses for hospital and public health staffs are in progress and the center is providing training aids and instructors for agencies training their own workers.

The Communicable Disease Center has been widely recognized as a key factor in the national and world conquest of infectious diseases. As a result, we are requesting an increase of \$660,000 in its 1960 budget. These additional funds would be used chiefly to extend the fluorescent antibody technique and to intensify the nationwide attack on staphylococcal disease.

The main objective of many of our Public Health Service programs, in fact, is to give State and local health agencies a good start in the delivery of organized services designed to attack vigorously problems which have risen in magnitude.

DIVISION OF RADIOLOGICAL HEALTH

During the past year, for example, a Division of Radiological Health has been established in the Bureau of State Services in accordance with an early recommendation from our National Advisory Committee on Radiation under the chairmanship of Dr. Russell H. Morgan. Its final report was submitted in March 1959, copies of which have been presented to this and other congressional committees.

Major recommendations would place responsibility for the establishment of standards for radiation protection of the general population in the Public Health Service, give the State health departments a larger role in the enforcement of standards and the conduct of control programs, and would increase PHS research, technical assistance, and training activities in this field.

Our new Division of Radiological Health has assisted 15 States in making inventories of their resources for an attack on radiation exposures in the general population. This Division serves as our liaison with the Atomic Energy Commission, other Federal agencies, and national organizations, such as the American College of Radiology and the American Medical Association.

We have assigned trained specialists to our regional offices in San Francisco and Denver and to the State health departments of Michigan, Minnesota, Oregon, and Texas.

The health officers of Colorado, Florida, and New York are seeking increased appropriations from their State legislatures to accelerate their control programs. Our 1960 budget request includes an increase of \$805,000 for the Division of Radiological Health.

STATE AND LOCAL ACTION IN PREVENTIVE WORK

State and local activities in accident prevention, chronic disease control, health of the aged, and improvement of nursing home care have increased in some parts of the country, but, on the whole, community programs in these fields fall far short of needs.

It has been suggested, for example, that the crippling effects of heart disease, stroke, arthritis, and severe injuries could be avoided in a large proportion of the cases occurring annually, if prompt action were taken in hospitals and at home to prevent irretrievable loss of muscular and joint function.

During the past year, the Public Health Service launched a project to encourage such preventive action for patients who have suffered a stroke.

The materials prepared for the "strike back at stroke" project are being used in several medical schools, and have been widely dis-

tributed by health departments and medical societies. We are now working on a similar project for arthritic patients.

There is still a great need for the development of community services which would supplement the physician's care of long-term patients in their own homes. I refer to such programs as nursing care and physiotherapy in the home, homemaker services, followup of ambulatory mental and tuberculosis patients, community referral centers for families with long-term patients, and the like.

PROBLEMS OF AGING

Only about 3 percent of the Nation's aged persons are in institutions. Yet older persons not in institutions have disability rates due to illness and injury which are from two to three times as high as those in persons under 65.

The aged also spend at least twice as many days per capita in general hospitals as the population as a whole. Any plans to improve the health care of the aged, therefore, must be accompanied by greater efforts to provide satisfactory community services so that more of them may receive long-term care in their homes. They will need care in general hospitals at certain times. Some of them will need institutional care for long periods. But the vast majority will do better, and enjoy more active life in their own or a relative's home.

DIRECT PROGRAMS OF THE PUBLIC HEALTH SERVICE

INDIAN HEALTH

We have made excellent progress in the Indian health program during the past year. As the committee is well aware, the Public Health Service encountered serious difficulties in meeting the two basic needs of a comprehensive health and medical care program for Indians and Alaska natives, namely, facilities and personnel.

I am happy to tell you that both those bottlenecks have been broken. I shall leave the details to Dr. Lowry and Dr. Shaw. Suffice it to say that for the first time in our experience, a high proportion of young physicians applying for commissions in the Public Health Service this year specified a preference for the Indian health program.

To me, this is a good index of the improvements that have been made in staff housing, in hospital and health facilities, and in the organization and delivery of high quality services.

Before January 1, 1960, five additional health centers and the new 75-bed hospital at Shiprock, N. Mex., will have been completed.

Most significant of all, the efforts of our Indian health staffs have been richly rewarded by the growing acceptance of services on the part of Indians and Alaskan natives, and by the increasing interest of tribal groups and individual leaders in better health as an attainable goal for their people. In short, the Indian health program is ready for a strong advance toward that goal.

We have not met all the needs for facilities. We have not solved all the problems of recruitment and retention of personnel. Demands for service are increasing and the increase will accelerate with the completion of new facilities and growth of the Indian population.

A recent conference in Denver with State health officers encourages

us to believe that we will be able to obtain more adequate public health services of high quality through State agencies with Indian groups under their jurisdiction. Taking all factors into account, we are requesting an increase of \$1,360,000 in the Indian health program for 1960. We know it can be spent profitably.

MEDICAL CARE

With increased congressional support in recent years, we have also made progress in the provision of hospital and medical care for other beneficiaries of the Public Health Service. In the past 4 years, the average length of stay in general hospitals has decreased by more than 2 days.

There is a continuing increase in admissions to outpatient services. We hope to move forward in bringing personnel ratios and equipment in these hospitals and clinics up to levels consistent with the provision of modern medical services of high quality.

MEDICARE

Under the medicare program, our Public Health Service hospitals are providing care for larger numbers of uniformed services personnel and their dependents.

In the calendar year 1958, for example, these classes of patients accounted for increases of 26,000 hospital days of care and almost 66,000 outpatient visits over the figures for the year prior to the passage of the Dependents' Medical Care Act.

SEAMEN'S MEMORIAL RESEARCH LABORATORY

Early last month, our hospital at New Orleans opened a small research facility, dedicated as the Seamen's Memorial Research Laboratory. The laboratory was developed as a cooperative research program involving two medical schools in New Orleans and the National Institutes of Health. We hope to see more of such research programs in our hospitals.

FOREIGN QUARANTINE SERVICES

Foreign quarantine services have functioned admirably during the past year, often against handicaps in lack of personnel and, always, in the face of a vastly increased and growing international traffic.

It is important that as we press for the development of new programs, we do not overlook the justified needs of old programs, especially those like quarantine which are related to nationwide health protection.

During the past year, our small staff of about 550, covering 310 points of entry in the United States and 28 consulates abroad, medically examined or inspected some 5,218,000 persons, 69,000 aircraft, and over 34,000 vessels. They gave vaccinations and treatments to nearly half a million of those persons. Overseas, examinations of persons applying for visas have increased from about 158,000 in 1955 to 220,000 in this year.

INTERNATIONAL HEALTH

Although the Public Health Service's direct operations in international health are not large, I feel that I should give this committee

some information on developments in this important field, since the Service represents our Government in its relation with the World Health Organization and has other responsibilities in international health.

The 12th World Health Assembly will convene in Geneva next week, at which time I will conclude my term as president of the Assembly and again serve as chief delegate of the United States.

Our country has participated in setting up the world health goals established by WHO. They include the eradication of malaria and smallpox throughout the world; an unrelenting attack on problems of basic sanitation, deficiency diseases, and maternal and child health.

Cancer, radiation exposure, mental disease, and other problems prevalent in highly developed countries like our own are scheduled for increased attention.

The expansion of health research throughout the world is contemplated for action by the Assembly. Preliminary studies financed by a grant from the Public Health Service have been completed. Our country has taken the leadership in pressing for international health research, with the enthusiastic cooperation of many other countries including Russia. Legislation has been introduced in Congress, which, if enacted, would greatly augment our cooperation in this field.

CONCLUSION

Mr. Chairman and members of the committee, I am most grateful for your attention to my presentation of Public Health Service activities. The budget request for 1960 is much less than the funds appropriated for our programs in 1959, chiefly because of the administration's policy of curtailing new construction starts in 1960.

The proposed budget would, however, permit us to move forward in certain important areas.

Although professional judgment would justify requests for additional funds in some fields, we are well aware that the Public Health Service budget must be developed in the framework of the total Federal budget, and in accordance with the fiscal policy of the administration.

AMOUNTS REQUESTED

The principal reduction in our total budget is in the area of construction of health facilities. Approximately \$150 million less is requested than was available in 1959. About \$126 million of this decrease is in construction grants, and the remainder in Public Health Service facilities.

I have mentioned the expiration of the public health and nurse training programs, which accounted for \$8 million in 1959 appropriations. Our 1960 plans in this area are contingent on the enactment of legislation by the 86th Congress.

General assistance to State public health programs is at about the same level as in 1959, but there is a reduction of \$1,700,000 in grants for tuberculosis and venereal disease control.

An increase of \$660,000 is requested for the Communicable Disease Center and one of \$805,000 for the Division of Radiological Health. Small increases are also reflected in the estimates for air-pollution and water-pollution control. We are requesting increases of about

\$1 million for hospitals and medical care and \$1,360,000 for the Indian health program.

There are a few other small increases, including one for \$150,000 in the Office of the Surgeon General. This would permit us to meet the increased demands of an organization which has grown in recent years beyond the capacity of our limited staff. Operating programs will suffer unless my office can provide the general services and guidance they should have.

Before concluding, may I also comment upon the increases given in the House?

Senator HILL. Go right ahead.

EFFECT OF HOUSE ACTION

Dr. BURNEY. In its action on the 1960 budget request, the House voted increases in Public Health Service items which total \$132,042,000. These increases include \$79 million for construction programs, \$50 million for operating programs of the National Institutes of Health, \$2 million for Indian health activities, \$727,000 for venereal disease control, and \$315,000 for water pollution control.

Members of my staff who will appear before the committee in the course of these hearings will be prepared to indicate the ways in which these additional funds would be utilized.

Although professional judgment could justify additional appropriations in some fields, any increase over the President's budget estimates is contrary to the fiscal policy of the administration.

I, and the other members of the staff, Mr. Chairman and members of the committee, will be very pleased to answer any questions.

Senator HILL. Doctor, may I say this, that you and I made the right decision when we discussed this matter of which statement you should read, the short summary statement or the longer statement which you just presented to us, and I am sure those of us who read this fine statement agree that we made the right decision in choosing the longer statement.

Of course, I do not think this committee has ever had a more informative, finer, or more comprehensive statement as to the health needs and health problems of the American people than you have given us this morning. We certainly thank you.

Dr. BURNEY. Thank you, Mr. Chairman.

Senator HILL. Now, before we take up the separate items, maybe some member of the committee would like to ask any questions he might of the general before we proceed any further.

OIL INDUSTRY AND AIR POLLUTION

Senator MONRONEY. During the House hearings I believe there was considerable discussion on air pollution and on the failure of some of those who supply the fuel and of the automobile industry to participate in the proper research, I have had considerable correspondence from some of my friends in the oil industry, of which Oklahoma is one of the centers, stating that they felt that you did not give them any credit for the work and money that they are spending on that study.

Now, I wonder if you have information on their program or if such information was submitted to you following the criticism that was voiced in the House?

Dr. BURNEY. Senator, I am glad you brought up the question because when I answered the question in the House I was quoting from statements—from information from my staff, which was about 6 months old. I learned after I gave that testimony, from our own staff, that I was not up to date on the most recent cooperative efforts between, not only the automobile industry, but also the petroleum industry in our studies on air pollution, particularly as it relates to automobile exhausts.

I have a pretty comprehensive statement from the staff relative to the funds that are being expended by the oil industry, as well as the automobile industry, the cooperative projects between them and us: as well as certain other cooperative endeavors, plus the fact that one of their members serves on our air pollution advisory group; so as I say, I am glad you brought it up because I did not have available, when this question was asked of me in the House, the most recent information.

RECORD OF WORK OF OIL INDUSTRY

I would be pleased to submit a statement relative to both what the oil industry is doing and the cooperative projects that we have now between the Public Health Service and the oil industry.

Senator MONROE. If you could supply that for the record, I know they would appreciate it and the committee would appreciate having that information.

Dr. BURNEY. We will be glad to.

(The information referred to follows:)

COLLABORATION BY PETROLEUM INDUSTRY ON AUTO EXHAUST AIR POLLUTION PROBLEMS¹

A. General relationships of industry:

Collaborates with auto industry through a coordinating committee.

Is represented on Public Health Service National Advisory Committee on Air Pollution.

Through American Petroleum Institute, the Western Gas and Oil Association, and other organizations, has conducted air pollution research with aid of an advisory committee.

B. Specific projects supported by oil industry:

Development of analytical procedures for quantitative differentiation of hydrocarbons (Coordinating Research Council, U.S. Bureau of Mines). (This work also supported by U.S. Public Health Service.)

Development of field analytical method for determination of ozone.

Reactions of hydrocarbons and organic matter with oxides of nitrogen and sunlight to produce smog (Stanford Research Institute).

Study of fuel composition and other factors associated with auto exhaust emissions, their reactions in air and of eye irritation and plant damage (Air Pollution Foundation).

Development and use of long-path infrared spectrometer to study auto exhaust gas reactions in the atmosphere (Franklin Institute.)

Effects of organic materials in the atmosphere on vegetation (University of California).

Air analyses of certain cities for comparison with Los Angeles (Kettering Laboratory).

C. Present status:

Total annual industry research expenditure on air pollution (all phases, including auto exhaust) estimated by American Petroleum Institute at \$1 million.

¹This statement is limited to auto exhaust problems: the industry has also devoted attention to air pollution problems arising from its production, processing, and distributing activities.

ASSISTANCE TO STATES, GENERAL

APPROPRIATION ESTIMATE

“To carry out the purposes, not otherwise specifically provided for, of section 314(c) of the Act; to provide consultative services to States pursuant to section 311 of the Act; to make field investigations and demonstrations pursuant to section 301 of the Act; to provide for collecting and compiling mortality, morbidity, and vital statistics; [to provide traineeships pursuant to section 306 of the Act;] and not to exceed \$1,000 for entertainment of officials of other countries when specifically authorized by the Surgeon General; [\$22,889,000] \$22,497,000.”

Amounts available for obligation

	1959 appro- priation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$22, 889, 000	\$22, 497, 000	\$22, 497, 000
Comparative transfers from other accounts.....	308, 000		
Pending supplemental appropriation.....	750, 000		
Total obligations.....	23, 947, 000	22, 497, 000	22, 497, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
ACTIVITIES						
1. Grants:						
(a) To States for general health.....		\$15, 000, 000		\$15, 000, 000		\$15, 000, 000
(b) For public health training.....		2, 000, 000		0		0
(c) To schools of public health.....		450, 000		1, 000, 000		1, 000, 000
2. Direct operations:						
(a) Technical assistance to States.....	275	2, 227, 900	272	2, 206, 200	272	2, 206, 200
(b) Vital statistics.....	206	1, 620, 100	206	1, 624, 000	206	1, 624, 000
(c) International health activities.....	20	150, 400	20	150, 800	20	150, 800
(d) Special health services:						
1. Health of the aged and chronic diseases.....	107	1, 153, 800	107	1, 155, 500	107	1, 155, 500
2. Occupational health.....	94	855, 100	94	869, 900	94	869, 900
3. Accident prevention.....	31	373, 800	31	374, 400	31	374, 400
(e) Administration.....	11	115, 900	11	116, 200	11	116, 200
Total obligations.....	744	23, 947, 000	741	22, 497, 000	741	22, 497, 000

Obligations by objects

	1959 appro- priation	1960 budget estimate	1960 House allowance
Total number of permanent positions.....	744	741	741
Full-time equivalent of all other positions.....	33	33	33
Average number of all employees.....	721	721	721
Number of employees at end of year.....	777	775	775
01 Personal services.....	\$1, 976, 800	\$4, 982, 400	\$4, 982, 400
02 Travel.....	397, 500	400, 700	400, 700
03 Transportation of things.....	49, 900	16, 900	46, 900
04 Communication services.....	49, 700	49, 400	49, 400
05 Rents and utility services.....	110, 800	110, 800	110, 800
06 Printing and reproduction.....	117, 100	116, 700	116, 700
07 Other contractual services.....	245, 000	245, 000	245, 000
Services performed by other agencies.....	25, 200	25, 200	25, 200
Purchase of vital records transcripts.....	150, 000	150, 000	150, 000
08 Supplies and materials.....	91, 200	90, 900	90, 900
09 Equipment.....	47, 500	42, 400	42, 400
11 Grants, subsidies, and contributions.....	17, 450, 000	16, 000, 000	16, 000, 000
Contribution to retirement fund.....	215, 400	215, 800	215, 800
13 Refunds, awards, and indemnities.....	700	700	700
15 Taxes and assessments.....	20, 200	20, 100	20, 100
Total obligations.....	23, 947, 000	22, 497, 000	22, 497, 000

Allocations of grant-in-aid funds for general health

State or Territory	1958 alloca- tions	1959 alloca- tions	Esti- mated 1960 alloca- tions	State or Territory	1958 alloca- tions	1959 alloca- tions	Esti- mated 1960 alloca- tions
Alabama.....	\$414,200	\$404,800	\$397,500	New Hampshire...	\$59,200	\$59,800	\$59,800
Alaska.....	63,200	59,900	60,500	New Jersey.....	343,200	349,000	352,500
Arizona.....	121,000	124,700	127,300	New Mexico.....	111,300	109,900	108,300
Arkansas.....	273,600	263,800	256,500	New York.....	1,048,000	1,007,500	993,800
California.....	861,700	873,400	881,700	North Carolina...	529,200	526,400	523,300
Colorado.....	157,000	159,400	162,500	North Dakota....	101,200	98,300	97,600
Connecticut....	131,400	129,400	130,300	Ohio.....	637,500	636,700	639,400
Delaware.....	26,200	27,300	27,800	Oklahoma.....	237,400	238,100	235,100
District of Colum- bia.....	52,300	50,500	50,300	Oregon.....	161,500	163,500	164,400
Florida.....	349,700	366,100	388,300	Pennsylvania....	830,000	825,300	815,300
Georgia.....	426,000	423,000	419,700	Rhode Island....	61,500	63,800	65,200
Idaho.....	87,900	86,900	89,300	South Carolina...	305,700	307,300	311,100
Illinois.....	609,700	613,400	621,100	South Dakota....	102,800	103,300	101,500
Indiana.....	341,000	346,300	345,700	Tennessee.....	413,100	402,700	392,700
Iowa.....	246,500	256,700	258,100	Texas.....	817,500	823,300	828,100
Kansas.....	206,400	206,200	205,200	Utah.....	103,900	105,000	106,300
Kentucky.....	356,700	352,300	351,400	Vermont.....	52,100	53,000	52,300
Louisiana.....	335,600	333,700	328,100	Virginia.....	348,500	354,600	364,400
Maine.....	108,500	110,400	111,000	Washington.....	206,700	210,600	213,000
Maryland.....	204,200	206,800	210,000	West Virginia....	225,700	222,300	214,400
Massachusetts...	339,700	337,100	329,500	Wisconsin.....	307,400	315,400	320,600
Michigan.....	520,200	532,400	537,000	Wyoming.....	54,000	52,000	52,300
Minnesota.....	291,700	297,500	296,300	Hawaii.....	53,000	55,100	57,300
Mississippi.....	353,600	354,900	350,800	Puerto Rico.....	262,100	253,000	250,900
Missouri.....	357,000	352,100	346,900	Virgin Islands...	7,500	7,700	7,700
Montana.....	79,100	79,800	81,900	Guam.....	9,400	9,800	9,700
Nebraska.....	152,100	154,300	154,000				
Nevada.....	44,400	43,500	44,300	Total.....	15,000,000	15,000,000	15,030,000

STATEMENT OF CHIEF, BUREAU OF STATE SERVICES, PUBLIC HEALTH SERVICE, ON ASSISTANCE TO STATES, GENERAL

Mr. Chairman and members of the committee, the appropriation titled "Assistance to States, general" supports a variety of important activities that have never been given the distinction of separate appropriations as have communicable disease control, sanitary engineering services, cancer, etc. They do, however, bear a basic relationship to all such categorical activities in that they promote the sound community organization and staffing on which all these depend for success, and develop programs of significance to special population groups such as the aged, those exposed to occupational health hazards, and migrant workers.

Public health throughout the country is faced with two great challenges today. One is the rapid development of new technical knowledge as the result of the multimillion dollar research programs supported by taxes and voluntary gifts. The other is the rapidly changing composition and urbanization of the population.

The ultimate test of the value of knowledge gained by research is its use for the benefit of man. Yet one of the most difficult tasks of the health professions is to get the American public to use the health-saving knowledge we now have.

It has taken great effort on the part of private physicians and health authorities everywhere to achieve the measure of success attained in vaccination against polio. Nevertheless, that success is so imperfect that in 1958 there were 1,000 more cripples than in 1957, although the vaccine was in plentiful supply throughout the year and its effectiveness has been known for more than 3 years. We know that a real victory requires community organization and persistence.

GENERAL HEALTH GRANT

To assist States in maintaining their operational ability to provide basic preventive health services and to extend their services into new areas of health protection, this appropriation contains funds for a general health grant to States. This grant is not earmarked for a specific disease-oriented program, but may be used to meet high priority health needs which vary among the States. It is thus the most responsive of all Public Health Service grants to

the most pressing and current needs of individual States. Repeatedly, the State and Territorial health officers at their annual conference with the Surgeon General have singled out this grant as their most uniquely helpful type of assistance.

During the last 2 years we have been placing special emphasis on encouraging States to use a portion of this grant to initiate and expand services in new program areas. As a result of this financial and consultative stimulation, an increasing amount of these grant funds are being used in new and enlarged programs of chronic disease control and aging, nursing care of the sick in their homes, radiological health services, and occupational health. Consistent with the need to maintain and strengthen programs of basic preventive health services, we shall continue to press for the States to use the flexibility offered by the general health grant to modernize their programs in order to keep pace with research developments.

OTHER SERVICES TO STATES

In addition to the general health grant, this appropriation aids the States by enabling the Bureau of State Services to carry out applied or developmental investigations, training, consultation, and demonstration programs, and to disseminate new knowledge through national conferences and other avenues of information.

TRAINING

Training of personnel has always been a serious concern in our field and the need was recognized in the enactment of title I of the Health Amendments Act of 1956. The program thus authorized is helping to meet that need. It has not only enabled over 1,500 professional people to take graduate training in public health on federally financed traineeships, but it has also stimulated States and local health departments to finance more training. A legislative proposal providing for extension of the program is in process of preparation and clearance for submission to the Congress.

More than two-thirds of the students in the Nation's 11 schools of public health are sponsored by Federal, State, local, and international government agencies. The tuition paid covers, on the average, only 11 percent of the basic teaching costs. For the academic year 1957-58, the difference between tuition received and the teaching costs for Government-sponsored students amounted to more than \$3 million.

The schools need assistance to maintain high quality instruction and to modernize their curriculums. They are rendering an important service to the Nation by training personnel for Government service both here and overseas. The students come from every part of the country, 75 percent of them from States other than the ones in which the schools are located, and return to every section of the country to take employment in official and voluntary health agencies.

The grant for schools of public health constitutes the only increase in this appropriation request. Authorization for this grant was provided by the Congress last year in Public Law 85-544. We are requesting a \$500,000 supplemental appropriation for 1959 to cover the initial cost of the program this year and the full \$1 million authorization for 1960 to be paid out in grants to these schools.

STIMULATING APPLICATION OF KNOWLEDGE

We use many techniques to stimulate the application of knowledge. These range from sponsorship of national conferences to staff consultation, demonstration projects, and the preparation of program guides and manuals covering a wide variety of special health problems.

NATIONAL CONFERENCES

The National Conference on Nursing Homes and Homes for the Aged, held last February, was particularly significant because it brought together representatives from public, private, and proprietary nursing homes and specialists in numerous health and welfare professions. It was, perhaps, the first time that such a widely representative group had faced up to the inadequacies in the care of ill and elderly people in institutions. The important tasks identified by such a conference left us an action program to follow for some time to come and staff consultation in this field will focus around these tasks.

DEMONSTRATIONS

We find demonstrations an effective way to start new activities. A pilot program will show a community what can be achieved and we, ourselves, obtain evaluative experience which is useful in our work with other communities.

Right now, for example, we are financing a glaucoma detection program here in the District. It is being carried out by the District of Columbia Health Department with the cooperation of the District Medical Society. We hope, by this demonstration, to show that it is practical and profitable for persons over 40 years of age to participate in a mass screening program at periodic intervals. Such a procedure, we believe, would get persons with early cases of glaucoma to their doctors and thus permit treatment of the disease which accounts for 14 percent of all blindness in the United States.

TECHNICAL ASSISTANCE

Once a program has been adopted in many places, it may need continuing technical help. Poison control centers afford a good example. Here in the city of Washington alone over 2,600 children, during the past 2 years, have swallowed an incredibly strange assortment of products. These are useful and necessary products and entirely safe for the purposes for which they were intended. But with more and more children in our society, and with more and more new and different products coming on the market, it is inevitable that occasionally the two get together in a disastrous way.

That is why Washington and many other communities have established poison control centers. Physicians can call these centers and get immediate information about the content and the antidote for any product at any time, day or night. But just as it is not possible for the individual physician to keep up on all the new products, so it is likewise impossible for any one poison center to keep itself fully informed. Consequently, we maintain a national clearinghouse for poison control centers as a part of our accident prevention program. This clearinghouse feeds our new information to the local centers and also collects data from the centers which enable its staff to identify new hazards promptly and also to make special studies and investigations.

TRAINING MATERIALS

In the preparation of program guides and manuals, combined with demonstrations of their use, we render a very important service. Two such documents which have proved especially popular are devoted to improving the care, recovery, and physical rehabilitation of stroke patients and patrons of nursing homes.

To help physicians train members of families who are caring for stroke patients, we have prepared an illustrated pamphlet which shows the exercises these patients should be helped to do at home. Developed with the cooperation of the American Medical Association and other groups, the pamphlet is designed to be given to the patient's family by their doctor. The doctor checks the particular exercises his patient needs and discusses the rehabilitation regime with the family.

The "Teaching Guide for Nursing Aides" is a manual to be used in teaching the untrained people who serve as nursing aides in homes and institutions for the chronically ill and aged. The Red Cross, I am happy to report, is furnishing this manual to its nurse instructors so that they can go into the nursing homes in their communities and provide this instruction. The manual is also being used by health department nurses, nursing home administrators, and others. It offers an easy way to teach simple rehabilitation and other services to the corps of untrained women who are in most direct and constant touch with invalids, and who, if guided, can do the most to protect them from physical and mental regression.

PATTERNS OF HEALTH ORGANIZATION

The tremendous changes in our economy and in the very makeup of our population which have occurred in recent years have profound implications for public health. Organizational patterns as well as service programs must be adjusted. How can we meet the health needs of the dwindling rural population, now only 12 percent of our total population? What health safeguards must be built into the new communities that are springing up almost overnight on the fringes of our cities? What can we do to assure good health to the growing numbers of

citizens who can look forward to many years or life after they reach retirement age?

Such questions are very much in the forefront of public health thinking at all levels of government. In this Bureau, we are putting increased emphasis on research in public health practice, and in State and local health departments we are finding a new and intense interest in the research approach. Old established programs are being examined and challenged. Are they really effective? Are they still needed? Should their methods be changed? Along with this challenging, we find an increasing amount of experimentation. Some communities are making an intensive study of the need for continuing health care of people after they have retired. Some are working on the problem of establishing more effective relationships between hospital, home care, and nursing programs for the chronically ill. A few communities that lack full-time health departments are experimenting in the use of their community hospitals as health information centers. This variety of experimentation is a desirable development that we seek to encourage.

ROLE OF THE PUBLIC HEALTH NURSE

Improvement of the health of the community today depends more than ever before on each individual's actions, continuing over a long period of time. When the acute communicable diseases were our major problem, once the family decided to be immunized, the necessary action could be completed within 3 weeks. Of the major health problems, the chronic diseases require sustained action by the family to adhere to a prescribed regime of diet, exercises, and medications for many years. The public health nurse is a key member of the health team which helps these patients get the maximum benefit from the new discoveries in medical science. She also gives nursing care and rehabilitation services herself over long periods of time. Recent studies have shown that the care of the chronically ill takes over twice as long as the care of the acute communicable disease case.

The need for nursing services does not rise and fall with death rates but rather with the type of nursing procedures needed to help the patient (or community) achieve maximum health. Our new Division of Public Health Nursing, included in this appropriation, is responsible for finding new and more effective ways of supplying these services.

OCCUPATIONAL HEALTH

Just as the growth of our aging population intensifies the need for a good public health nursing program, so the growth of the Nation's working force adds to the importance of those programs which protect the worker from on-the-job health hazards. Our occupational health program is constantly meeting requests for consultative services and is also carrying on a number of important research projects.

One such project received an increase this year; namely, the study of silicosis which is one of the important pneumoconioses. This year, in cooperation with the U.S. Bureau of Mines, we began a pilot study in metal mines to determine the extent of silicosis and to develop more effective methods of controlling dust exposures.

CONCLUSION

I have purposely covered a rather wide range of examples in order to highlight the fact that efforts to put health knowledge to use must be in balance with efforts to develop new knowledge if the public is to get maximum value from its total health investment.

The program I have discussed, as well as the other Bureau programs which are covered by special appropriations, are primarily focused upon the task of seeing that health knowledge is translated into useful procedures, promptly and widely applied.

The amount requested for the "Assistance to States, general" appropriation in 1960 of \$22,497,000 is most urgently needed. This provides for an increase of \$500,000 for the full year implementation of the program of grants to schools

of public health and continuation of the following programs at essentially the same level as in 1959:

- Grants to States for general health;
- Technical assistance to States;
- National Office of Vital Statistics;
- International health activities; and
- Special health programs in the following fields:
 - Health of the aged and chronic disease;
 - Occupational health; and
 - Accident prevention.

I have with me here today Dr. Shafer, Chief of the Division of General Health Services, who has responsibility for the general health and training grant programs and the technical assistance and National Office of Vital Statistics activities and Dr. Albert Chapman, Chief of the Division of Special Health Services, who is in charge of our programs for chronic disease control and health of the aged, accident prevention, and occupational health. We shall be glad to discuss these estimates and our programs with you and answer any questions that you may have concerning them.

BUDGET ESTIMATE

Senator HILL. General, in your budget estimate for assistance to States, general, you have the same amount insofar as your grants to the several States is concerned next year, as you had this year; is that correct?

Dr. BURNEY. Yes, sir.

Senator HILL. Now, I notice the Budget cut the amount for the control of venereal diseases and the House restored that item?

Dr. BURNEY. Yes, sir.

CONTROL OF VENEREAL DISEASES

STATEMENT OF DR. C. A. SMITH, DEPUTY CHIEF, COMMUNICABLE DISEASE CENTER; ACCOMPANIED BY DR. DAVID E. PRICE, CHIEF, BUREAU OF STATE SERVICES; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"To carry out the purposes of sections 314(a) and 363 of the Act with respect to venereal diseases and for grants of money, services, supplies, equipment, and use of facilities to States, as defined in the Act, and with the approval of the respective State health authorities, to counties, health districts, and other political subdivisions of the States, for venereal disease control activities, in such amounts and upon such terms and conditions as the Surgeon General may determine; **[\$5,400,000]** \$4,673,000."

Amounts available for obligation

	1959 appropriation	1960 budget to Congress	1960 House allowance
Appropriation or estimate	\$5,400,000	\$4,673,000	\$5,400,000
Comparative transfer to other accounts.....	27,000	0	0
Total obligations.....	5,373,000	4,673,000	5,400,000

Obligations by activities

	1959 appropriation		1960 budget estimate		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
ACTIVITIES						
1. Grants to States for venereal disease.....		\$2, 400, 000		\$1, 700, 000		\$2, 400, 000
2. Direct operations:						
(a) Clinical and laboratory research.....	93	813, 000	93	813, 000	93	813, 000
(b) Technical assistance to States.....	254	1, 928, 000	254	1, 928, 000	254	1, 955, 000
(c) Administration.....	30	232, 000	30	232, 000	30	232, 000
Total obligations.....	377	5, 373, 000	377	4, 673, 000	377	5, 400, 000

Obligations by objects

	1959 estimate	1960 estimate	House allowance
Total number of permanent positions.....	377	377	377
Full-time equivalent of all other positions.....	122	85	85
Average number of all employees.....	468	433	433
Number of employees at end of year.....	474	450	450
01 Personal services.....	\$2, 864, 300	\$2, 674, 300	\$3, 374, 300
02 Travel.....	139, 300	139, 300	139, 300
03 Transportation of things.....	28, 800	28, 800	28, 800
04 Communication services.....	31, 200	31, 200	31, 200
05 Rents and utility services.....	22, 300	22, 300	22, 300
06 Printing and reproduction.....	13, 000	13, 000	13, 000
07 Other contractual services.....	84, 800	84, 800	111, 800
Services performed by other agencies.....	10, 000	10, 000	10, 000
Research contracts.....	104, 000	104, 000	104, 000
08 Supplies and materials.....	138, 900	138, 900	138, 900
09 Equipment.....	52, 000	52, 000	52, 000
11 Grants, subsidies, and contributions.....	1, 863, 400	1, 353, 400	1, 353, 400
13 Refunds, awards, and indemnities.....	600	600	600
15 Taxes and assessments.....	20, 400	20, 400	20, 400
Total obligations.....	5, 373, 000	4, 673, 000	5, 400, 000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	381	\$5, 400, 000
Comparative transfer to other accounts.....	-4	-27, 000
Revised 1959 base.....	377	5, 373, 000
1960 appropriation request.....	377	4, 673, 000
Net change requested.....	0	-700, 000
	1960 budget estimate	1960 House allowance
For mandatory items: Extra day of pay (261 days in 1959 and 262 days in 1960), \$7,750 absorbed in personal services.....	0	0
For program items:		
Grants to States for venereal disease control.....	-\$700, 000	+\$700, 000
Development of private physician reporting on infectious syphilis.....	0	27, 000
Total change requested.....	-700, 000	+727, 000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$727,000 for control of venereal diseases. As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

The addition of \$700,000 of this amount to the budget request of \$1,700,000 by the House has restored the amount available for venereal disease project grants to the level of support for 1959 or \$2,400,000. The project grants will be used primarily to support casefinding activities in known or suspected high incidence and prevalence areas to halt the spread of venereal disease infection and to reduce the reservoir of untreated or inadequately treated syphilitics, who are candidates for premature disability and death. This will permit the addition of approximately 100 venereal disease investigators to State and local casefinding programs. The additional \$27,000 for technical assistance to States will be utilized to develop and produce information materials directed at private physicians, pointing out the urgent need for close cooperation between them and the health department to achieve lasting control over the disease.

As stated by the Secretary when he appeared before the committee such an increase would further contribute to inflation and weakening of the national economy. The Department has recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

PREPARED STATEMENT

Senator HILL. Now, who can give us a little summation on the venereal disease item?

Dr. BURNEY. I think Dr. Smith can give a brief statement on the status of the venereal diseases in the United States.

Senator HILL. We will insert your statement in full in the record, and you summarize it for us, will you, Doctor?

(The statement referred to follows:)

STATEMENT OF DEPUTY CHIEF, COMMUNICABLE DISEASE CENTER, PUBLIC HEALTH SERVICE ON CONTROL OF VENEREAL DISEASES

Mr. Chairman and members of the committee, it is always a welcome opportunity to appear before this committee and report on the venereal disease problem in the United States, as reflected by reported morbidity, and on the programs being carried on to meet it. It was in 1955 that we first reported that the rapid rate of decline, previously evident nationally in the reported incidence of primary and secondary syphilis cases, was beginning to level off. This was of great concern to public health people everywhere since the primary and secondary stages of syphilis are the most infectious. This rapid decline has not been reestablished, in fact the total of 6,685 primary and secondary syphilis cases reported in 1958 represents an increase of 6.4 percent over the previous year. Fortunately, this is only the second time since 1947 that a nationwide increase in the number of reported cases has occurred. The first of these increases occurred in 1956.

We have reviewed the results of the control efforts and find that there are two major factors with which we must cope in order to control syphilis. By control we mean that every case of syphilis which occurs is reported, that every reported case is interviewed, and all source and spread cases are brought to diagnosis and appropriate treatment. The first major factor is incomplete reporting of infectious syphilis, thus failing to trigger the control mechanism for all cases.

To improve the reporting of cases, it is essential that health departments throughout the Nation develop close cooperative working relationships with the private physician, offering their services to him and encouraging his active participation in the total program. Toward this end the venereal disease program of the Public Health Service has encouraged local and State health departments to hold private physician seminars and has assisted local health

officials in presenting the venereal disease story to private physicians. The Public Health Service has also assigned several trained interviewer-investigators to State and city health departments for the purpose of contacting private physicians, to encourage them to report their cases and to offer the services of the health department in providing epidemiologic followup services. Where this has been done, results of these activities have been exceptionally good. The physicians have been interested and their cooperation has been demonstrated through increased reporting of infectious cases.

In a recent epidemic, involving some 370 persons, private physicians played an important role in breaking the chain of infection. The first knowledge that the health department had of the epidemic potential resulted from the report of a local physician to the health department that he had treated an infectious syphilis case. A trained venereal disease investigator interviewed the case for sex contacts and associates and, as a result, some 51 additional primary and secondary syphilis cases were brought to treatment. The cooperation of the physicians in controlling this epidemic was excellent as indicated by the fact that 70 percent of the infectious cases brought to treatment were diagnosed and treated in physicians' offices.

The second major factor complicating venereal disease control efforts is the increasing incidence of syphilis among teenagers. The number of primary and secondary syphilis cases reported as occurring in persons under 20 years of age increased by 22 percent in 1957, and in the epidemic I just mentioned, one-third of the persons involved were teenagers. The high number of cases of new venereal infection occurring among teenagers has shown the ineffectiveness of present-day control methods directed toward this group. Consequently the venereal disease program has undertaken a study to attempt to determine some of the basic factors which influence teenage sex behavior. The findings from this study will be applied toward improving the epidemiologic technique used by trained interviewer investigators in halting the spread of infection and in the development of venereal disease educational material.

Progress in gonorrhea control has been slow, largely because of the difficulty of diagnosing gonorrhea in the female. Frequently, for this reason, no attempt was made to determine the presence of the disease and treatment was often prescribed solely on the basis of the history of exposure. In recognition of the need for an efficient, practical diagnostic technique, additional funds were appropriated for this fiscal year, and laboratory work in adapting fluorescent tagged antibody procedures to the diagnosis of gonorrhea has been most promising. It is expected that this work will have progressed sufficiently during the next few months so that limited field testing can be undertaken. A successful development in this field will constitute a major step forward in enhancing the possibilities of undertaking effective gonorrhea control programs throughout the Nation.

The budget before you, of \$4,673,000, for "Control of venereal diseases" provides for those Federal activities which are most essential in meeting the challenge of the venereal diseases in the United States. It proposes a reduction of \$700,000, to the same level as the President's budget for 1959.

Senator HILL. Did the Department ask the Budget for the full amount that they had for last year?

Dr. SMITH. The Department asked for \$2.4 million in grants and a total of \$2.98 million in direct operations.

Senator HILL. Was that what you had for this year?

Dr. SMITH. Yes, sir.

Senator HILL. In other words, the Department asks for the same amount for this coming fiscal year that you have for the present fiscal year?

Dr. SMITH. Yes, sir.

Senator HILL. And the Budget cut the amount \$727,000, which the House itself restored; is that right?

Dr. SMITH. That is right.

Senator HILL. All right, give us a brief summation as to why you feel the need for the full amount.

REASONS FOR REQUEST FOR FULL AMOUNT

Senator SMITH. Mr. Chairman, that is in the face of our increasing population and our increasing cost.

Senator HILL. That is right, Senator.

Dr. SMITH. Mr. Chairman and members of the committee, in fiscal year 1958, a total of 6,685 primary and secondary syphilis cases was reported, representing an increase of 6.4 percent over the previous year. Fortunately, this is only the second time since 1947 that a nationwide increase in the number of reported cases has occurred.

The major factors contributing to the continued high syphilis incidence are the incomplete reporting of infectious syphilis, thus failing to trigger the control mechanism for all cases; and, secondly, the increasing number of cases, among teenagers, of syphilis.

To meet these problems the venereal disease program of the Public Health Service is assisting the States in developing close cooperative working relationships with private physicians and is conducting studies on teenage venereal diseases so as to improve venereal disease epidemiological and educational programs.

Laboratory work on a good diagnostic tool for gonorrhea has progressed satisfactorily. It is hoped that field trials of the work in adapting the fluorescent tagged antibody procedures in the diagnosis of gonorrhea can be initiated shortly.

WORK UNDER BUDGET REQUEST

The budget estimate of \$4,673,000 provides for those Federal activities which are most essential in meeting the challenge of the venereal diseases in the United States.

Senator HILL. The Public Health Service and your Department did ask for the same amount for this coming fiscal year that you have had for the present fiscal year?

Dr. SMITH. That is right.

Senator HILL. And you have had this increase in your syphilitic infections?

Dr. SMITH. Yes, sir.

Senator HILL. Are there any questions on that?

If not, we thank you.

CONTROL OF TUBERCULOSIS

STATEMENT OF DR. EDWARD T. BLOMQUIST, CHIEF, TUBERCULOSIS PROGRAM; ACCOMPANIED BY DR. ALBERT CHAPMAN, CHIEF, DIVISION OF SPECIAL HEALTH SERVICES; DR. DAVID E. PRICE, CHIEF, BUREAU OF STATE SERVICES; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"To carry out the purposes of section 314(b) of the Act, **[\$6,386,000]** \$5,452,000, of which not less than **[\$4,000,000]** \$3,000,000 shall be available only for grants to States, to be matched by an equal amount of State and local funds expended for the same purpose, for direct expenses of prevention and case-finding projects including salaries, fees, and travel of personnel directly engaged in pre-

vention and case-finding and the necessary equipment and supplies used directly in prevention and case-finding operations, but excluding the purchase of care in hospitals and sanatoria.”

Amounts available for obligation

	1959 appro- piation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$6,386,000	\$5,452,000	\$5,452,000
Comparative transfer to other accounts.....	-49,000		
Pending supplementary appropriation.....	115,000		
Total obligations.....	6,452,000	5,452,000	5,452,000

Obligations by activities

Description	1959 appropriation		1960 budget estimate		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
ACTIVITIES						
1. Grants to States for tuberculosis control.....		\$4,000,000		\$3,000,000		\$3,000,000
2. Direct operations:						
(a) Cooperative applied research.....	151	1,811,100	151	1,811,100	151	1,811,100
(b) Technical assistance to States.....	50	481,200	50	481,200	50	481,200
(c) Administration.....	19	159,700	19	159,700	19	159,700
Total obligations.....	220	6,452,000	220	5,452,000	220	5,452,000

Obligations by objects

	1959 appro- piation	1960 budget estimate	1960 House allowance
Total number of permanent positions.....	220	220	220
Full time equivalent of all other positions.....	11	11	11
Average number of all employees.....	220	219	219
Number of employees at end of year.....	246	246	246
01 Personal services.....	\$1,417,500	\$1,417,500	\$1,417,500
02 Travel.....	173,600	173,600	173,600
03 Transportation of things.....	35,200	35,200	35,200
04 Communication services.....	12,500	12,500	12,500
05 Rents and utility services.....	25,200	25,200	25,200
06 Printing and reproduction.....	12,000	12,000	12,000
07 Other contractual services.....	427,400	427,400	427,400
08 Supplies and materials.....	233,500	233,500	233,500
09 Equipment.....	25,000	25,000	25,000
11 Grants, subsidies, and contributions.....	4,000,000	3,000,000	3,000,000
Contribution to retirement fund.....	85,400	85,400	85,400
15 Taxes and assessments.....	4,700	4,700	4,700
Total obligations.....	6,452,000	5,452,000	5,452,000

Summary of changes

	Positions	Amount
1959 actual appropriations.....	227	\$6,386,000
1959 pending supplemental appropriation.....		115,000
Total appropriation.....	227	6,501,000
Less comparative transfer.....	-7	-49,000
Revised 1959 base.....	220	6,452,000
1960 appropriation.....	220	5,452,000
Net change requested.....		-1,000,000

Summary of changes—Continued

	1960 Budget estimate	1960 House allowance
Decreases: Grants to States for tuberculosis control.....	—\$1,000,000	—\$1,000,000
Increases: For mandatory items: Extra day's pay (261 days in 1959 and 262 days in 1960, \$4,675 absorbed in personal services).....	0	0
Total change requested.....	—1,000,000	—1,000,000

Allocations of grant-in-aid funds for tuberculosis control

State or Territory	1958 allocations	1959 allocations	Estimated 1960 allocations	State or Territory	1958 allocations	1959 allocations	Estimated 1960 allocations
Alabama.....	\$100,800	\$89,600	\$67,400	New Hampshire...	\$15,700	\$14,500	\$12,500
Alaska.....	36,900	27,700	21,000	New Jersey.....	123,400	110,600	80,900
Arizona.....	57,600	56,000	40,800	New Mexico.....	34,000	31,700	24,600
Arkansas.....	76,900	66,500	47,400	New York.....	413,700	378,600	279,900
California.....	283,700	277,800	206,800	North Carolina...	100,000	87,700	64,400
Colorado.....	35,300	33,000	25,800	North Dakota....	22,000	16,000	13,500
Connecticut.....	44,300	38,800	29,100	Ohio.....	197,200	178,300	129,600
Delaware.....	16,500	15,700	12,900	Oklahoma.....	61,700	54,000	40,400
District of Columbia.....	41,700	35,600	28,200	Oregon.....	35,300	32,700	26,100
Florida.....	83,900	83,700	66,800	Pennsylvania.....	263,500	224,600	163,000
Georgia.....	103,000	85,300	62,800	Rhode Island.....	24,000	22,400	13,200
Idaho.....	15,600	14,700	12,900	South Carolina...	67,900	60,200	45,100
Illinois.....	239,400	220,700	162,600	South Dakota....	19,800	18,700	15,300
Indiana.....	88,800	81,300	62,100	Tennessee.....	128,100	107,900	77,200
Iowa.....	39,800	35,900	27,700	Texas.....	197,400	175,100	128,500
Kansas.....	36,500	33,500	26,800	Utah.....	17,600	17,000	14,800
Kentucky.....	122,200	105,800	75,200	Vermont.....	16,200	15,400	13,000
Louisiana.....	87,200	75,800	56,100	Virginia.....	112,300	101,200	71,000
Maine.....	25,500	23,600	18,900	Washington.....	51,800	51,800	39,600
Maryland.....	88,000	77,900	60,100	West Virginia....	59,800	54,000	40,200
Massachusetts.....	113,800	101,600	73,200	Wisconsin.....	58,800	57,800	45,000
Michigan.....	146,700	140,900	107,700	Wyoming.....	11,300	11,000	10,200
Minnesota.....	53,200	43,100	36,800	Hawaii.....	25,700	21,000	17,900
Mississippi.....	75,100	61,200	45,100	Puerto Rico.....	236,600	154,800	109,400
Missouri.....	110,500	97,300	69,700	Virgin Islands...	8,300	8,200	8,000
Montana.....	20,600	19,900	16,700	Guam.....	11,300	10,200	9,500
Nebraska.....	25,200	23,800	19,400				
Nevada.....	12,900	12,900	11,200	Total.....	4,500,000	4,000,000	3,000,000

HOUSE CUT

Senator HILL. Will you summarize for us the story on tuberculosis? I notice the budget made quite a cut in the funds for tuberculosis, some \$1,049,000. I do not know what the situation is in other States, but I do know in the past year in Alabama, we had an increase in the number of tuberculosis cases.

Dr. BLOMQUIST. Yes, sir.

Would you like a general statement about the tuberculosis situation?

Senator HILL. Yes.

Did you ask for the same amount for this coming fiscal year that you had for this year?

Dr. BLOMQUIST. We asked for the same amount.

Senator HILL. Tell us why you asked for the same amount.

Dr. BLOMQUIST. We asked for the same amount because the tuberculosis problem is relatively the same.

PROBLEMS OF TB CONTROL

We are finding that the number of deaths is decreasing yet the number of cases occurring annually is about the same. The changes in the way patients are treated, namely, the shortened period in the hospital and the increased time for post hospital care means an increased responsibility for the health departments. We estimated that there is a considerable difference between the number of cases reported each year and the actual caseload. There are roughly three times as many cases under care at any one time by the health departments as there are new cases reported. The average period of care for an active case runs around 2 years. This means we must provide clinics, we must provide public health nursing, and medical supervision during this extended period of time.

Consequently, we felt that the amount of money that was needed was, from a professional standpoint, equal to what we had used in previous years.

Senator HILL. In other words, although the death rate has been reduced, insofar as the work to which these funds apply, that work is just as necessary today; and, if anything, the workload has been increasing; is that correct? It has increased, has it not?

NEED FOR INCREASED SUPERVISION

Dr. BLOMQUIST. Yes. I think the relative need for public health supervision has increased. In the past years when care could only be given in the institutions, the responsibility rested chiefly with them. Now, with the change, namely, a shorter period of hospitalization, but a longer period of post hospital care, the health department has more responsibility. Drugs have done a really remarkable job in reducing the deaths; however, they have not had time to appreciably change the number of new cases arising and tuberculosis is still a chronic disease. It is a long-term disease.

The period of hospitalization in the last 20 years has been cut to less than half, but the period after patients leave the hospital, runs, on the average, 2 years, still 2 years.

Senator HILL. It is still 2 years, and this means all the more work for your local public health departments?

Dr. BLOMQUIST. Yes, sir; it does.

Senator HILL. And that is the work for which these funds pay?

Dr. BLOMQUIST. Yes, sir.

Senator HILL. Are there any questions?

EFFECT OF REDUCTION ON SERVICES

Senator BIBLE. Mr. Chairman, I have only one question: If I read this correctly, you are receiving \$1,049,000 less than you expended, than was budgeted in fiscal 1959, is that correct, for the control of the tuberculosis program? Do I read this correctly?

Mr. ACKERMAN. Yes, sir. \$49,000 is a transfer into another appropriation. The actual reduction in this appropriation is \$1 million in grants.

Senator BIBLE. How will that actually affect the service?

Dr. BLOMQUIST. I beg your pardon?

Senator BIBLE. How will that actually affect the service if you have \$1 million less in fiscal 1960 than in fiscal 1959? How is that evidenced throughout the control of tuberculosis? Who will suffer, and how?

Dr. BLOMQUIST. It will essentially be noticed in the difference in the local health services, the services to the patient at the local level.

Senator BIBLE. What is that in manpower?

Dr. BLOMQUIST. We made an estimate last year of what the reduction would do, and we have a statement here that indicates that it will reduce, on the basis of plans, the amount of casefinding that can be done.

It will also reduce the amount of personnel that is available. It will hit public health nursing services, laboratory, and clinic services.

Senator BIBLE. How much less personnel will we use this year, fiscal 1960, versus 1959?

Dr. BLOMQUIST. It is difficult to give an actual number.

Senator BIBLE. Just give it to me approximately.

EFFECT ON STATES

Mr. KELLY. Perhaps it would help if it was pointed out that this \$1 million is entirely grants to States and not the Federal personnel.

Senator MONRONEY. Are there matching funds?

Mr. KELLY. Yes, sir.

Senator MONRONEY. Whatever this cut, it will be double that if the situation is a 50-50 matching of funds that will undoubtedly be lost?

Mr. KELLY. If the States and local communities reduce their efforts correspondingly, yes.

Mr. ACKERMAN. We have a table which shows the difference in allocations between the 2 years by States.

Senator HILL. Would you want that table in the record?

Senator BIBLE. I would suggest that table be put in the record.

The thing I am trying to arrive at is this: Am I going to hear from my State of Nevada that you have cut off three Public Health nurses assigned to the control of tuberculosis?

You must have some idea of how this \$1 million is evidenced, and that is all I am trying to ask.

SUMMARY STATEMENT OF EFFECTS

Dr. BLOMQUIST. The best summary statement I can get from plans submitted to me indicates that we will have a reduction of about a half of the operating case finding units, and that there would be serious public health nursing reductions in four States, clinics in seven States, and laboratory programs in two States. These changes are based on plans and on correspondence we have received.

Senator HILL. That does not take in all of the 50 States in the United States? In other words, those States that you have checked would show those reductions, but it does not cover the 50 States?

Dr. BLOMQUIST. That is right, sir.

Senator BIBLE. Obviously, it will affect all 50 States in some respects.

Senator HILL. Of course, there would be a reduction in each one of the 50 States, is that right?

DISTRIBUTION OF CUTS

Dr. BLUMQUIST. Indeed there would be. I can give you the figures as to the distribution of these cuts.

Senator BIBLE. I think that might be supplied for the record.

Dr. BLUMQUIST. I would be glad to do so.

Senator BIBLE. Thank you, Mr. Chairman.

(The information referred to follows:)

Tuberculosis control grants

State	1958 allocation	1959 allocation	Reduction between 1959 and 1958	1960 estimated allocation	Reduction between 1960 and 1959	Reduction between 1958 and 1960
Total	\$4, 500, 000	\$4, 000, 000	-\$500, 000	\$3, 000, 000	-\$1, 000, 000	-\$1, 500, 000
Alabama	100, 800	89, 600	-11, 200	67, 400	-22, 200	-33, 400
Alaska	36, 900	27, 700	-9, 200	21, 000	-6, 700	-15, 900
Arizona	57, 600	56, 000	-1, 600	40, 800	-15, 200	-16, 800
Arkansas	76, 900	66, 500	-10, 400	47, 400	-19, 100	-29, 500
California	283, 700	277, 800	-5, 900	206, 800	-71, 000	-76, 900
Colorado	35, 300	33, 000	-2, 300	25, 800	-7, 200	-9, 500
Connecticut	44, 300	38, 800	-5, 500	29, 100	-9, 700	-15, 200
Delaware	16, 500	15, 700	-800	12, 900	-2, 800	-3, 600
Dis'trict of Columbia	41, 700	35, 600	-6, 100	28, 200	-7, 400	-13, 500
Florida	83, 900	83, 700	-200	66, 800	-16, 900	-17, 100
Georgia	103, 000	85, 300	-17, 700	62, 800	-22, 500	-40, 200
Idaho	15, 600	14, 700	-900	12, 900	-1, 800	-2, 700
Illinois	239, 400	220, 700	-18, 700	168, 600	-52, 100	-70, 800
Indiana	88, 800	81, 300	-7, 500	62, 100	-19, 200	-26, 700
Iowa	39, 800	35, 900	-3, 900	27, 700	-8, 200	-12, 100
Kansas	36, 500	33, 500	-3, 000	26, 800	-6, 700	-9, 700
Kentucky	122, 200	105, 800	-16, 400	75, 200	-30, 600	-47, 000
Louisiana	87, 200	75, 800	-11, 400	56, 100	-19, 700	-31, 100
Maine	25, 500	23, 600	-1, 900	18, 900	-4, 700	-6, 600
Maryland	88, 000	77, 900	-10, 100	60, 100	-17, 800	-27, 900
Massachusetts	113, 800	101, 600	-12, 200	73, 200	-28, 400	-40, 600
Michigan	146, 700	140, 900	-5, 800	107, 700	-33, 200	-39, 000
Minnesota	53, 200	48, 100	-5, 100	36, 800	-11, 300	-16, 400
Mississippi	75, 100	61, 200	-13, 900	45, 100	-16, 100	-30, 000
Missouri	110, 500	97, 300	-13, 200	60, 700	-27, 600	-40, 800
Montana	20, 600	19, 900	-700	16, 700	-3, 200	-3, 900
Nebraska	25, 200	23, 800	-1, 400	19, 400	-4, 400	-5, 800
Nevada	12, 900	12, 900	0	11, 200	-1, 700	-1, 700
New Hampshire	15, 700	14, 500	-1, 200	12, 500	-2, 000	-3, 200
New Jersey	123, 400	110, 600	-12, 800	80, 900	-29, 700	-42, 500
New Mexico	34, 000	31, 700	-2, 300	24, 600	-7, 100	-9, 400
New York	418, 700	378, 000	-40, 700	279, 900	-98, 700	-138, 800
North Carolina	100, 000	87, 700	-12, 300	64, 400	-23, 300	-35, 600
North Dakota	20, 000	16, 000	-4, 000	13, 500	-2, 500	-6, 500
Ohio	197, 200	178, 300	-18, 900	120, 600	-48, 700	-67, 600
Oklahoma	61, 700	54, 000	-7, 700	40, 400	-13, 600	-21, 300
Oregon	35, 300	30, 700	-4, 600	26, 100	-4, 600	-9, 200
Pennsylvania	263, 500	224, 000	-39, 500	168, 000	-56, 000	-95, 500
Rhode Island	24, 000	22, 400	-1, 600	18, 200	-4, 200	-5, 800
South Carolina	67, 900	60, 200	-7, 700	45, 100	-15, 100	-22, 800
South Dakota	19, 800	18, 700	-1, 100	15, 300	-3, 400	-4, 500
Tennessee	128, 000	107, 900	-20, 200	77, 200	-30, 700	-50, 800
Texas	197, 400	175, 100	-22, 300	128, 500	-46, 600	-68, 900
Utah	17, 000	17, 000	-000	14, 800	-2, 200	-2, 200
Vermont	16, 000	15, 400	-600	13, 000	-2, 400	-3, 000
Virginia	112, 300	101, 200	-11, 100	71, 000	-30, 200	-41, 300
Washington	51, 800	51, 800	0	39, 000	-12, 800	-12, 800
West Virginia	50, 800	54, 000	3, 200	40, 200	-13, 800	-19, 600
Wisconsin	58, 800	57, 800	-1, 000	45, 000	-12, 800	-13, 800
Wyoming	11, 300	11, 000	-300	10, 200	-800	-1, 100
Hawaii	25, 700	21, 000	-4, 700	17, 900	-3, 100	-7, 800
Puerto Rico	230, 000	154, 800	-75, 200	100, 400	-45, 400	-127, 600
Virgin Islands	8, 300	8, 200	-100	8, 000	-200	-300
Guam	11, 300	10, 200	-1, 100	9, 500	-700	-1, 800

CITIES WITH HIGH INCIDENCE OF TUBERCULOSIS

Senator HILL. I note there are cities where the incidence of tuberculosis is higher than in other cities. Can you tell me what cities they are?

Dr. BLOMQUIST. Eleven of the 18 cities with over 500,000 population have tuberculosis death rates more than half again the rate for the continental United States. They are New York City, Chicago, Philadelphia, Baltimore, Cleveland, St. Louis, Washington, Boston, Pittsburgh, Houston, and New Orleans. There are an even greater number of cities of between 100,000 and 500,000 that have very high death rates.

In addition to the large tuberculosis problem in urban areas, there are six States (Arizona, Arkansas, Kentucky, New Mexico, Tennessee, and Alaska) none of which have a city of half a million people, which also have death rates 50 percent over the national average.

Senator HILL. Do you have a special program to take care of the additional services needed in these high incidence cities?

Dr. BLOMQUIST. Of the amount requested, 57 percent would go into grants to the States, 33 percent into operational research, and 10 percent into technical assistance to the States. Operational research activities apply to the problem in all the States. Technical assistance is directed specifically to high incidence areas. Grants to the States are distributed on a formula in which case and death rates are a factor, but the additional amount that goes to high incidence States because of this factor is relatively small. We do not have special project grants as in the venereal disease control program.

Senator HILL. Are the present services providing, in some measure, for the control of tuberculosis?

Dr. BLOMQUIST. The Federal grants to States provide about 9 percent of the total expenditures for tuberculosis control activities. The amount that the individual States spend per newly reported case varies in some instances by as much as \$600. However, the difference between the amount per case received from the Federal grant by the States that have the least to spend and the amount received by the States that have the most is less than \$20.

ELIMINATION OF TUBERCULOSIS IN AMERICA

Senator HILL. I read that Dr. Johannes Holm, Director of WHO Tuberculosis Services believes that tuberculosis can be eliminated as a public health problem. Do you believe this is a practical goal in this country? What are your plans for the elimination of tuberculosis in America?

Dr. BLOMQUIST. Yes, this is a practical goal in the United States, but the time needed to reach it will vary widely in different areas. In the cities and States that still have a big tuberculosis problem, eliminating it will require more time and effort than will be needed in more favored areas. Our plan is to concentrate efforts and resources more and more on the areas that continue to have a lot of tuberculosis.

Senator HILL. We have a vaccine—BCG—against tuberculosis. If you want to cut down sources of infection and thus eliminate tuberculosis, don't you have to vaccinate the people most exposed to tubercu-

losis infection in our high incidence cities? Why don't you use BCG in high incidence cities?

Dr. BLUMQUIST. In a total program to eliminate tuberculosis from a high incidence area, the use of BCG for tuberculin negative contacts on known cases would have a part. It is now being used in this way in some of the big cities—New York, for instance. You may recall that in June 1957, the Surgeon General appointed an ad hoc committee to reconsider the Public Health Service policy and program in the field of BCG vaccination. With regard to the question of the use of BCG in particular instances, the committee expressed the opinion that the use of BCG should be determined by the particular circumstances obtaining in a local community or population group. The committee report goes on to say, and I quote from it:

This determination should be based on a wide variety of factors, among the most important of which will be the strength of the tuberculosis program as a whole, the prevalence of tuberculosis in the community at the time, and the probable risk of infection in the future. In general, the question will come up for decision chiefly in groups or communities where exposure is high and weakness in other means of control is recognized. It was believed by the committee that the responsible officials in such communities and groups should be sufficiently well informed on the advantages and disadvantages of BCG vaccination, through currently available reports, to make an intelligent decision.

The information contained in the committee's report has been widely disseminated to all State and local authorities by the Public Health Service.

AMOUNT REQUESTED

Senator HILL. Doctor, did you say you are asking the same amount for next year as you have in the present fiscal year?

Dr. BLUMQUIST. No, sir.

Senator HILL. In other words, \$6,501,000?

Dr. BLUMQUIST. No, sir; \$5,452,000; a \$1 million decrease.

Senator HILL. Are there any other questions on tuberculosis now?

If not, thank you very much, Doctor. Your prepared statement will appear in the record in full.

(The statement referred to follows:)

STATEMENT OF CHIEF, TUBERCULOSIS PROGRAM, PUBLIC HEALTH SERVICE, ON CONTROL OF TUBERCULOSIS

Mr. Chairman and members of the committee, last year in the United States, 13,324 people died of tuberculosis. When deaths from a controllable disease can be numbered in the thousands it is far too many, but still this number is 11,000 fewer than it was in 1952 and 35,000 fewer than in 1947. The number of new cases reported annually has changed, too. It was 135,000 in 1947, 110,000 in 1952, and 87,000 last year.

These figures actually measure a triumph of public health, one that has been accomplished by determined and persistent effort. The progress is all the more remarkable in view of the nature of tuberculosis. For one thing, even the wonderfully successful drugs now used against the disease do not kill the causative organism, but only hold it in abeyance, giving the body, with time, a chance to overcome it. Furthermore, when the tubercle bacillus once enters the body, it remains as a possible focus of active disease for as long as its host lives, and this is a disease that does not announce itself suddenly by acute symptoms, but has a firm hold before its victim is himself aware of illness. Tuberculosis control is therefore a laborious task of finding cases and seeing that they are treated until patients have fully recovered.

Case finding in tuberculosis, as the incidence of the disease declines, requires careful selection of groups to be screened, informed judgment about suitable

techniques to be used, and faithful followup to insure the diagnosis of all suspects. For some populations, tuberculin testing is used to single out persons who have been infected and who should then be X-rayed to see if they have signs of active disease. In many areas, however, the adult population has such a high level of infection that the X-ray must still be used for initial screening. Whatever the method of case finding, however, diagnostic facilities, including laboratory services, are needed before cases can be found for treatment.

The new drugs have made possible the successful treatment of many patients with relatively short periods of hospitalization or none at all. Tuberculosis is still a long-term illness, however. The average length of hospitalization is still about 8 months, and continued treatment at home is usually necessary for more than a year after that. A recent study of the home treatment program in one State showed that more than a quarter of the patients still had active disease after 2 years of treatment and another 40 percent with inactive or arrested disease still required drug therapy. The problems of medical care, provision of drugs, the laboratory and X-ray work so necessary to determine a patient's progress, which were once chiefly the responsibility of hospitals, now fall more heavily on health departments.

Grants to the States for tuberculosis control help them to provide these essential services. The technical assistance which the tuberculosis program makes available to the States is for the purpose of helping them to make the adjustments and improvements in their casefinding and clinic programs that are necessary in terms of the present tuberculosis program.

A result of public health progress against tuberculosis is the lowering of the rate of new infection. Therefore, more and more of the new, active cases of tuberculosis occur in persons who were infected at some time in the past. If it were possible to find every active case and to prevent the spread of tuberculosis in that way, we would still have a great reservoir of the disease in the nearly one-third of our adult population who have already been infected. A way to prevent the development of active disease in these people is therefore a critical need. Without such a preventive measure, we can expect tuberculosis to continue to be an important public health problem for a long time.

The tuberculosis program has been studying the effectiveness of isoniazid for this prophylactic purpose for several years. Last year we reported on a study involving 2,700 children who reacted to tuberculin, about half of whom received isoniazid for a year and the others placebo. In the group at highest risk, isoniazid reduced the rate of complications from 70 down to 8 per 1,000 cases. Data are now being analyzed from the second year's experience of these children, after they are no longer taking pills. Continued observation will produce answers to the important question of whether isoniazid is effective in preventing breakdowns from tuberculosis later in life.

Nearly 40,000 persons are enrolled in the study of household contacts of newly reported tuberculosis cases and of inmates of institutions where tuberculosis rates are often high. While valid information about the effectiveness of isoniazid in these circumstances is not yet available, the study is already throwing light on a number of questions of great importance to tuberculosis control. For instance, it is defining in detail the risk of tuberculosis among adults who live in the home of a tuberculosis patient. As these people are being found to have a many times higher incidence of the disease than the general population, they are being clearly identified as a group toward whom public health efforts must be directed with increased intensity. Another pertinent finding in the study is that under the right circumstances people will take pills over a long period of time. Knowing that other workers had found this a problem, our people have given it special attention, and they report that interested and sympathetic persuasion is notably successful in enlisting the study group's cooperation.

In present-day tuberculosis work, the tuberculin test is of crucial importance, not only as a preliminary step in casefinding, but as a means of identifying candidates for isoniazid prophylaxis, if this proves to be a practical step. This test, which has been in use for many years, is the best tool available to determine whether or not a person has been infected with tuberculosis. Evidence has been accumulating, however, to indicate that while almost everyone who has been infected reacts to the test, not everyone who reacts has been infected. An important recent finding of Public Health Service studies was that organisms other than tubercle bacillus can cause tuberculin reactions, especially reactions below a certain size. These organisms are somewhat like tubercle bacilli, but only rarely cause clinical disease. Tests have shown that as many as two-thirds of the

population in certain areas have been infected, and in these people the interpretation of the tuberculin test is considerably complicated. It is for these reasons that continuing studies of the problem and of ways to improve the specificity and usefulness of the tuberculin test are an important part of the tuberculosis programs' research activities.

The amount of \$5,452,000 is requested for 1960 for the "Control of tuberculosis" appropriation, a decrease of \$1 million from the funds available for 1959. This reduction returns the program to the same level as was proposed in the President's budget for 1959.

SUPPORT FOR TUBERCULOSIS CONTROL FUNDS

Senator HILL. I have a letter from Senator Ervin to which he attaches a letter from Dr. J. W. R. Norton, North Carolina State Health Director, urging restoration of the "Tuberculosis control" appropriation to the 1958 level. These letters will become a part of the record at this point.

(The letters referred to follow :)

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
March 11, 1959.

Hon. LISTER HILL,
Chairman, Subcommittee on Health, Education, and Welfare, Senate Committee on Appropriations, Washington, D.C.

DEAR LISTER: I am enclosing a letter received today from Dr. J. W. R. Norton, director, State board of health, which I wish you and your committee to consider when you hold hearings on the Federal appropriation for tuberculosis control.

I wish particularly to call your attention, and the attention of your committee, to the need for a sufficient appropriation for the North Carolina State Board of Health, and I hope you may provide the necessary appropriation to carry on the work for tuberculosis control as specified by Dr. Norton.

With best wishes, I am,
Sincerely yours,

SAM J. ERVIN, Jr.

NORTH CAROLINA STATE BOARD OF HEALTH,
Raleigh, March 10, 1959.

Hon. SAM J. ERVIN, JR.,
U.S. Senate, Washington, D.C.

MY DEAR SENATOR ERVIN: It has recently come to my attention that the Federal appropriation for tuberculosis control for the North Carolina State Board of Health may be reduced from \$87,700, the 1958-59 appropriation, to \$64,400, or a 26 percent reduction. In this connection, I may say that the 1957-58 appropriation was also substantially reduced over the 1956-57 appropriation.

The 1958-59 reduction from the previous fiscal year of \$101,600 to \$87,700 resulted in our having to reduce field personnel by four persons and to reduce actively operating mobile X-ray units from six to four and this reduction decreases our case-finding activities.

During 1958, although our funds were reduced from the previous year, we were able to enter 31 counties and aid 25 counties by furnishing supplies to chest clinics and financial aid during county chest X-ray surveys. This additional aid was made possible through Federal chronic disease funds which were allotted during the spring of 1958; these funds are no longer available.

Since the organization of our tuberculosis control section in 1945 over 3 million persons in this State have had an X-ray of the chest made by our mobile X-ray units and approximately 14,000 tuberculosis suspects have been detected. These suspects were, of course, notified of their lung condition and placed under appropriate medical supervision. It is true that deaths from tuberculosis have dropped dramatically but during 1958 there were as many new cases of tuberculosis reported to the State board of health as during 1957.

In addition to finding tuberculosis of the lung our surveys also detect heart abnormalities from 0.5 to 1 percent of persons X-rayed, also some lung tumors

and other chest abnormalities. In fact it is the general opinion of doctors that an X-ray of the chest is one of the "must" medical examinations.

The tuberculosis control section in cooperation with our chronic disease section and the State sanatorium system has initiated and emphasized the organization of county chest clinics and since mid-1956 counties being served by such clinics have increased from 28 to 65.

It is earnestly hoped that you will use your influence toward restoring Federal funds to the 1957-58 amount or to \$101,600 for by such restoration we will be able not only to fill the four positions which were declared vacant but also to aid needy counties in defraying the expense of chest X-ray surveys and chest clinics which are so necessary in tuberculosis control.

Very truly yours,

J. W. R. NORTON, M.D.,
State Health Director.

COMMUNICABLE DISEASE ACTIVITIES

STATEMENT OF DR. ROBERT J. ANDERSON, CHIEF, COMMUNICABLE DISEASE CENTER

APPROPRIATION ESTIMATE

"To carry out, except as otherwise provided for, those provisions of sections 301, 311, and 361 of the Act relating to the prevention and suppression of communicable and preventable diseases, and the interstate transmission and spread thereof, including the purchase, erection, and maintenance of portable buildings; purchase of not to exceed [nine] three passenger motor vehicles for replacement only; and hire, maintenance, and operation of aircraft; [\$6,600,000] \$8,015,000."

Amounts available for obligation

	1959 appro- piation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$6, 600, 000	\$8, 015, 000	\$8, 015, 000
Comparative transfers from (—) other accounts.....	482, 500	-----	-----
Pending supplemental appropriation.....	290, 000	-----	-----
Total obligation.....	7, 372, 500	8, 015, 000	8, 015, 000

Obligations by activities

	1959 appro- piation		1960 budget estimate		1960 House allowance	
	Posi- tion	Amount	Posi- tion	Amount	Posi- tion	Amount
ACTIVITIES						
1. Disease prevention and control.....	746	\$5, 903, 000	817	\$6, 545, 000	817	\$6, 545, 000
2. Training.....	64	463, 000	64	463, 000	64	463, 000
3. Administration.....	82	520, 000	82	520, 000	82	520, 000
4. Arctic health research.....	52	486, 500	52	487, 000	52	487, 000
Total obligations.....	944	7, 372, 500	1, 015	8, 015, 000	1, 015	8, 015, 000

Obligation by objects

	1959 appro- piation	1960 budget estimate	1960 House allowance
Total number of permanent positions.....	944	1,015	1,015
Full-time equivalent of all other positions.....	7	12	12
Average number of all employees.....	865	902	902
Number of employees at end of year.....	898	959	959
01 Personal services.....	\$5,441,000	\$5,661,100	\$5,661,100
02 Travel.....	297,100	317,400	317,400
03 Transportation of things.....	69,200	170,800	170,800
04 Communication services.....	110,700	131,900	131,900
05 Rents and utility services.....	166,400	219,200	219,200
06 Printing and reproduction.....	27,000	27,200	27,200
07 Other contractual services.....	200,800	238,100	238,100
Services performed by other agencies.....	3,000	3,000	3,000
Research contracts.....	120,000	174,400	174,400
08 Supplies and materials.....	455,900	532,900	532,900
09 Equipment.....	180,600	221,000	221,000
11 Grants, subsidies, and contributions.....	227,000	243,000	243,000
13 Refunds, awards, and indemnities.....	4,500	4,500	4,500
15 Taxes and assessments.....	29,300	30,500	30,500
Unclassified (general epidemic and disaster aid).....	40,000	40,000	40,000
Total obligations.....	7,372,500	8,015,000	8,015,000

STATEMENT OF CHIEF, COMMUNICABLE DISEASE CENTER, PUBLIC HEALTH SERVICE,
ON COMMUNICABLE DISEASE ACTIVITIES

Mr. Chairman and members of the committee, the Communicable Disease Center aids the States in the control of infectious diseases with the objective of eliminating those diseases where present knowledge permits, and reducing the incidence and severity where knowledge is yet insufficient. New discoveries require translation into effective action to be of practical significance. This is the mission of the Communicable Disease Center in the field of epidemic and communicable disease. Each year new problems appear and old problems take on new aspects. For several years poliomyelitis was dominant. Last year Asian influenza was the primary and most serious problem. Now staphylococcal infections acquired in hospitals are of deep concern; and the upsurge in poliomyelitis has shown us that to be successful, the national program must be more complete.

FACTORS COMPLICATING DISEASE CONTROL

While such problems receive special attention, the whole broad field of communicable disease continues its challenge. The 130,000 deaths and the numerous disabilities from communicable diseases represent tremendous and needless economic losses to the Nation through reduced production and need for personal support, to say nothing of the agony of human suffering. The great progress which has been made during recent decades in stemming the infectious diseases shows us that they can be controlled; the outstanding examples in this country being smallpox, yellow fever, plague, and malaria. As these great killers have been subdued, however, we have found our problems becoming more complex each year. The increasing number of older citizens is making apparent their need for protection against infections, as well as the need for more knowledge on what effects acute attacks of infectious diseases in earlier years may have in causing or complicating chronic diseases of older life. At the same time, the enormous and continuing increase in the number of younger persons in the population focuses more and more attention on the number of cases of the common diseases of childhood. Our speedy transportation makes possible more rapid spread of infectious diseases, both within the country and from foreign lands where some of the diseases which we have subdued still commonly occur. Our own research shows that some disease symptoms which formerly were thought to be caused by one disease organism are, in fact, brought about by many differing organisms and must be prevented or treated in different ways. All in all, these changing problems and the broad spectrum of the many communicable diseases represent a tremendous assignment to the center—one that challenges the disciplines of all the scientists we have in our resources.

ASSISTING THE STATES THROUGH LABORATORY AND FIELD INVESTIGATIONS

Our resources of funds and scientific manpower permit us to direct major attacks against only a few of the more than 100 communicable diseases which occur in varying degrees of frequency and severity in the United States. Widespread major control programs are being conducted on selected disease programs. However, some of our technical advancements, such as in the laboratory sciences and disease-vector control have relatively broad application, and our epidemic and diagnostic services aid in all kinds of disease outbreaks.

CDC epidemiologists, working in close collaboration with the State health departments and the National Office of Vital Statistics, maintain a constant surveillance of disease and disease outbreaks to insure the maximum application of effective control measures. Working with the State and local health authorities, they try to prevent the spread of existing epidemics and to find ways to avoid recurrences. This often leads them into detailed and involved field investigations to find out the sources of outbreaks; this knowledge may be used at other places to prevent similar incidents. These field studies, and similar work being carried on by the States, are backed up by intensive studies in the CDC laboratories where we develop faster, cheaper, and more reliable methods for laboratory diagnosis. This leads to more accurate identification of the particular organisms causing disease symptoms, and to faster specific treatment of the patient. As these newer methods are developed and defined for common application, they are passed on for general use by means of field demonstrations and consultations by disease control specialists.

SPECIALIZED TRAINING

Another way in which we introduce better control methods is by the practical training of public health workers. It is from trained public health personnel that finally we may reap the harvest of public health improvement. One of the skills most necessary and unfortunately short is that of epidemiology. Since 1951 the work of the communicable disease program under this appropriation has provided the means for developing epidemiologists. Between 1951 and 1958, 136 promising young scientists, mostly medical, were trained in field epidemiology through 2-year working assignments under experienced leadership. They have entered into public health work as a profession or remain on call in national emergencies as Reserve officers. At present 39 more are engaged in this training. The CDC laboratories train specialists from the State and local public health laboratories in new or complex methods for disease diagnosis so that the States may be better equipped to diagnose specimens which they previously could not handle. This work has been especially significant in spreading knowledge of laboratory techniques for poliomyelitis and other virus disease identification, whereas only a few years ago most of these specimens had to be sent to the CDC or one of a very few other qualified laboratories for diagnosis. The CDC training specialists also develop course materials and audiovisual training aids for use by the State health departments in conducting their own training in public health practices.

A PROMISING TECHNIQUE FOR LABORATORY DIAGNOSIS

Applied research is a constant challenge to the ingenuity and inventiveness of our scientists. Among recent developments the fluorescent antibody diagnostic technique remains paramount in significance toward revolutionizing practices in laboratory diagnosis. This is a technique using a fluorescein dye which glows when exposed to ultraviolet light. Thus, the presence of specific organisms may be detected readily on a slide under a good microscope, even when present in only small numbers and in contaminated materials. This method has potential application to a wide variety of disease-causing organisms, including viruses, bacteria, parasites, and even pollen. The time required for specific identification may be reduced to as little as 1 hour for some of the bacteria and 24 hours for some of the viruses. This represents as much as a 30-fold reduction in the time required for disease diagnosis. Thus, the physician gains a great advantage in diseases where early diagnosis is a critical factor in selection of proper treatment. For example, in some cases of rabies, diagnostic time may be reduced from 1 month to 30 minutes. The diagnosis of certain streptococcal infections is possible 2 to 5 days faster than by conventional procedures. This has great significance in the

control of rheumatic fever and rheumatic heart disease. Another advantage is that the method will reduce the cost of materials required in diagnostic tests as much as 40-fold in some diseases.

The ultimate value of this development will be determined largely by the manner and degree to which it is exploited. During the past year the staining and identification has been increased from 16 to over 50 different organisms, but in most cases this has been wholly on a research basis. On some organisms, we are in only an initial research stage; in about 20, we are in the stage of advanced research, with considerable accomplishment but not ready for general laboratory introduction; in 4 or 5 others, we are undergoing practical field tests. However, a great deal of work remains to be done before the technique can be used widely. It must be made routine so that it can be handled by the average public health laboratory; suitable reagents must be prepared and made available; and public health laboratory workers must be trained in its use before the full promise of this very important medical development may be realized. The estimate requests additional funds so that we may make faster progress.

CONTROL OF STAPHYLOCOCCAL INFECTIONS

Another national problem of emergent significance is the one of staphylococcal infections in hospitals. Serious epidemics have struck many hospitals, causing abscesses and carbuncles, surgical wound infections, and fatal pneumonias. This old problem is taking on new and ominous aspects because virulent epidemic strains are spreading widely. These are resistant to penicillin and other commonly used antibiotics. This change not only limits the effectiveness of treatment of the patient, but it also prevents effective antibiotic prophylaxis to control further spread. The medical profession, hospital authorities, public health officials, and the general public recognize that this danger must be eliminated.

Last year the Congress provided additional funds for the development of ways to combat these infections and to assist in their suppression. That fund enabled the center to hold a national conference of leading hospital and public health authorities to evaluate the problem and recommend measures for overcoming it. The conference was followed by regional meetings of State groups to start programs using known methods for preventing spread of the infections. The CDC established a national staphylococcal laboratory to produce and distribute staphylococcus diagnostic materials to laboratories; to furnish laboratory and epidemic aid to them; to develop printed and film materials for use in control programs; and to help in the establishment of control programs within States. The pattern for a large-scale national control program has been developed and applied to a limited degree. Now the added funds requested will permit a more adequate nationwide application of this program. The requested increase will augment this program by furnishing more needed epidemic and laboratory aid to hospitals and health departments; performing research for better and faster ways to identify and type staphylococci; and training health department and hospital people on how to control outbreaks.

ASEPTIC MENINGITIS AND OTHER VIRUS DISEASES

The viral diseases represent some of the most difficult problems in communicable disease control. Among them the center is working particularly with the aseptic meningitis diseases, poliomyelitis, encephalitis, and rabies. The viral respiratory infections and viral hepatitis also are matters of great concern. As laboratory diagnostic methods advance, more and more new types and kinds of viruses are being discovered. While some of them are believed to reside in normal tissue, many others are known to cause diseases so closely resembling other diseases that they cannot be distinguished except by specific laboratory identification. As a further complication, the full extent of the pathologic effects of many of these viruses is not yet known. A large number of viruses cause diseases which are called aseptic meningitis which resemble poliomyelitis so that, until recently, they frequently were clinically diagnosed as polio and so reported. With diagnostic methods now available, these are being properly identified more commonly and are being dealt with separately. They account for a large segment of the virus infections. The CDC is pressing forward to further evaluate their significance as public health problems, identify their effects, find better ways to isolate and identify them, and prevent their occurrence.

POLIOMYELITIS

Control of poliomyelitis has not been achieved. More paralytic cases occurred in 1958 than in 1957. Particularly heavy outbreaks occurred in three areas, of which the Detroit epidemic was the worst. This, the second greatest in Detroit history, accounted for 627 cases. Another major outbreak occurred in the Virginia-West Virginia area, and a third in northern New Jersey. Each of these epidemics occurred in localized areas, largely among preschool children who had never been vaccinated. The epidemics did not spread to adjoining populations that were well-vaccinated. A high level of protection against paralytic polio is created by vaccination, but there must be an unrelenting emphasis of the vaccination program to obtain control.

We need specific knowledge on how poliomyelitis arises and is spread and the duration of protection which the vaccine affords. We do know that although an individual may be vaccinated, he still may act as a carrier of the disease and infect others. The development of new and better vaccines should be studied. Investigations on these problems, as well as research for better diagnostic methods, must continue for a long time.

ENCEPHALITIS

Viral encephalitis is another disease problem, uncontrolled and of national concern. It recurs constantly in many parts of the country, and is noted for flaring outbreaks. In 1958 there were no great concentrations of the disease to equal some other years, but the overall reported incidence of the disease was about 25 percent higher than in 1957. Some of the calls for epidemic aid assistance were, however, of local importance. One of these occurred in Utah, resulting in 20 human cases with 4 deaths. About 100 horses were found to be infected in the area. Calls for emergency aid were received also from El Paso, Tex., where 1 death occurred, and from the Las Cruces, N. Mex., area, where there were at least 20 human cases and 2 deaths, resulting in a temporary embargo on the importation of migratory labor needed to harvest the cotton crop. We know that viral encephalitis may be vectored by certain kinds of mosquitoes, and we know some of the reservoirs of the virus in nature. We do not know what the conditions are that favor the eruption of encephalitis. The CDC is continuing field studies on the problem. In the laboratory, we are seeking better means for specific identification of the causative viruses. There is an evident need for an effective vaccine against viral encephalitis which will be of long duration for general use. The CDC is conducting studies for modification of encephalitis viruses in order to produce a vaccine which will be effective.

RABIES

Rabies in 1958 again claimed few lives but significantly high incidence of the disease was reported among animals in eight States. Sharp outbreaks occurred in Atlanta, Ga.; Indianapolis, Ind.; and Lancaster, Pa. The disease occurs in domestic and wild animals in most parts of the United States, and out of an estimated 1 million persons bitten by animals in 1958, about 40,000 required the painful and sometimes dangerous series of rabies vaccinations. The Center is providing assistance to the States in working out rabies control programs in urban areas in an effort to bring about eventually a preventive network of national effectiveness. With the funds provided by Congress last year, a CDC rabies station has been established in Wisconsin to assist the surrounding States in their control programs, to study the nature of rabies in wildlife, to define geographic spread of the disease, and to learn how to prevent spillovers into urban domestic animals where the rate of human exposure is highest.

DISEASES TRANSMITTED FROM ANIMALS TO MAN

Through the years our knowledge of diseases which are communicable to man from animals has increased until now we know that there are more than 100 in the world; 50 are found in the United States. Some of the more important are brucellosis, Rocky Mountain spotted fever, psittacosis, trichinosis, and anthrax. Although individually these diseases do not cause a great number of deaths or disabling sicknesses, in the aggregate they are important. The problems which they give rise to are complicated by the economic values of the animals or their significance as pets. The CDC veterinary public health specialists con-

stantly meet calls for aid in outbreaks in animal-borne diseases and provide advice and consultation to local health authorities on means for their prevention and control. Some of these diseases are considered to be of primary importance in time of national emergencies and limited studies are being made on means for their suppression in the event of widespread infections.

HISTOPLASMOSIS AND OTHER FUNGAL DISEASES

The fungal diseases are being recognized increasingly as important public health problems. Histoplasmosis is a significant example. This disease, clinically very similar to tuberculosis, is extremely prevalent in the States in the Ohio River, upper Mississippi River, lower Missouri River, and central Atlantic areas, so that almost all of the populations in some areas become infected. Studies in the endemic regions have shown that from 3 percent to as high as 20 percent of the patients in TB sanatoriums were found positive for histoplasmosis. In the Far West, coccidioidomycosis, another fungal disease that can be disabling, affects millions of the population. These, and other fungal diseases, are being studied as resources permit to determine their causative agents, how they are spread, and means for their prevention and treatment.

DISASTER AID

The resources of the CDC always stand ready to furnish rapid assistance to the States in cases of disasters to prevent the spread of communicable diseases during times of disrupted water supplies, sewerage facilities, and housing accommodations. During 1958 some of the emergencies the Center was called upon to meet were caused by floods in Indiana, Arkansas, and the Texas gulf coast area. These emergency measures act to prevent and suppress outbreaks of diseases which otherwise could become widespread and cause added death and misery to an already burdened population.

ARCTIC HEALTH RESEARCH

In line with overall policy in connection with Alaska's attainment of statehood, the funds for Arctic health research activities are being included in this appropriation instead of the special territorial appropriation in which it was formerly carried.

The advent of Alaskan statehood, the rapid expansion of world population, advances in transportation that have provided ready access to Arctic areas, the vast natural resources of the Arctic, and changes in the character of military operations combine to emphasize the trend toward increased utilization of the Arctic.

Health problems associated with housing, water supply, waste disposal, and disease control, which are unique to low temperature areas have prevented the settlement and the effective utilization of these areas for centuries. The only U.S. effort to solve these problems is in the work of a small staff of scientists at the Arctic Health Research Center in Anchorage, Alaska. This small group of scientists has achieved worldwide prominence for their contribution to the advancement of knowledge of health problems in low temperature areas. Although their contribution has been substantial, our knowledge is still very meager compared with the extent of the problems which exist there.

During 1960, we plan to continue studies of factors and conditions in the Arctic environment which affect health and impede or prevent the development of populous communities. Mention of the tangible results of a few of the studies currently underway will serve to demonstrate the usefulness of this research effort. The results of our experimentation with various methods of securing and storing a water supply for individual families and for communities are being used by both the native and the white population. Where improved methods of waste disposal, housing construction, or health maintenance are demonstrated by our experiments, the advantages are being adopted by individuals, communities, the Armed Forces, and the Public Health Department of Alaska.

Of the numerous problem areas, we plan in 1960 to concentrate on a limited number of the most pressing needs and strengthen supporting services.

The bacteriology laboratory, which was deactivated to absorb the commissioned officers' pay increase during fiscal year 1959, will not be operated during 1960. In addition, we will discontinue support of research in Arctic physiology in order to strengthen our operation in—

(1) investigation of engineering and biological aspects of environmental sanitation in Arctic and subarctic regions including (a) the possibility of winter storage of community water supplies in a liquid state in earthen reservoirs and (b) the development of operational criteria for septic tanks in low temperature areas.

(2) field and laboratory studies of illness prevailing in low temperature areas, including clinical studies in cooperation with the Alaska Native Health Service Hospital, epidemiological investigations, and statistical services.

The Nation's battles against the communicable diseases have been successful almost uniformly in degrees paralleling the efforts and scientific manpower devoted to their suppression. The successes of the past are evidence that the need to control or eliminate them demands attack on a broad front to the fullest extent of our available resources. These studies to determine disease causes and introduce practical methods for their prevention must continue. For all of these purposes, an appropriation of \$8,015,000 is requested for the work in 1960. This will provide an added \$260,000 for intensification of development of the fluorescent antibody technique; \$245,000 for increased studies and assistance to control staphylococcal infections; \$127,000 to meet costs of moving into the new Communicable Disease Center buildings in Atlanta; and \$28,000 for mandatory increased personal services costs.

AMOUNT ALLOWED

Senator HILL. Doctor, I note that the communicable disease activity was allowed a \$1,125,000 increase.

I would like to know, first, how much of the proposed funds you asked for these activities and what was the basis for your request, the basis for the \$1,125,000 granted by the Budget?

Dr. ANDERSON. I would like to have Mr. Kelly speak to that request.

Mr. KELLY. When you use that word "final," you mean you go over there and ask for so much money and they say, "We cannot give you that; go back and work it down, and work it down."

Senator HILL. What was the original request?

ORIGINAL AMOUNT REQUESTED

Mr. KELLY. The Public Health Service requested of the Department—and I would like to qualify this figure because of a change in accounting—\$8,439,000.

The initial submission to the Budget Bureau was for \$7,943,000, and the final request was for \$8,326,000 and the final allowance was \$8,015,000.

However, in the first two figures that I gave you of the Public Health Service request, in the preliminary Department request there was not included the transfer of \$487,000 to provide in this appropriation for activities that were formerly carried under a special appropriation for Alaska.

Senator HILL. Those funds have now been transferred to these activities?

Mr. KELLY. That is correct.

Senator HILL. All right, Dr. Anderson, just state the purpose or the facts on which you based your original request here.

ARCTIC HEALTH RESEARCH CENTER

Dr. ANDERSON. The original request here for the appropriation was for the activities in the Arctic Health Research Center and the Communicable Disease Center in Atlanta. The Arctic Health Research

Center in Anchorage conducts field investigations on conditions and illnesses prevailing in low temperatures. In 1960, the emphasis there will be placed upon environmental health problems concerning water supplies and waste disposal under Arctic conditions, the frequency, the mode of spread, and the means for the control of specific and other infectious diseases in Alaska, and nutrition.

COMMUNICABLE DISEASE CENTER, ATLANTA

The Communicable Disease Center in Atlanta and at other stations, conducts and adapts research, and invents methods for improving other public health practices for communicable disease control.

We do this through disease surveillance and information, through consultation, technical services, training, and demonstration programs, with special aid for epidemic and disaster situations.

The request here invites your attention to two special activities:

The first is the problem of the staphylococcal infections within hospitals.

These infections, which were treated by antibiotics in recent years, have increasingly become antibiotic resistant, and they are epidemic in extent now and are apparently of greater virulence than before.

These outbreaks are of great concern to medical, hospital, and health authorities.

FUNDS TO AUGMENT SERVICE

Last year you appropriated additional funds to find ways to combat and to suppress these infections. These estimates request funds to augment the program of epidemic aid and specific services to hospitals and health departments; to perform research for better and faster ways to identify and type the staphylococcus, because unless we have this method of typing we cannot trace the epidemic spread; third, to train health department and hospital people in how to control and prevent outbreaks; and, fourth, to work on some of the environmental aspects of the spread of these infections by testing systems of disinfection, germicides, the air-ventilating systems within hospitals, and that type of investigation.

FUNDS TO ADVANCE NEW DIAGNOSTIC LABORATORY

The second requested increase here is for advancing this revolutionary fluorescent antibody diagnostic laboratory test which we described to your committee last year.

Senator HILL. We have some members on the committee this year that were not with us last year. You might just briefly tell them what you are addressing yourself to now, sir.

Dr. ANDERSON. Possibly I could illustrate it through some pictures I have here which will describe the technique used in the detection of either the organism which causes a disease or detects the effects caused by that organism in the human body.

The advantages of the technique are illustrated in that the amount of time that is required to make a diagnosis is appreciably shortened.

Dr. Burney mentioned the work with the streptococcal organisms which cause rheumatic fever. Using ordinary techniques today it takes 3 days to make a diagnosis of the streptococcal infection. Us-

ing this fluorescent antibody technique, this can be done within 1 to 3 hours.

The heart disease control program and the Communicable Disease Center are conducting investigations on the practical use of this technique in the State and local health department laboratories in Montgomery County, Md.; in North Dakota; and in Colorado, where we are finding that the technique does arrive at a diagnosis of the streptococcal infection very promptly under field conditions, so that the patient can be given the proper therapeutic and prophylactic treatment. We have also found with rabies, as Dr. Burney mentioned, that this technique will give a very prompt answer as to whether or not the rabies virus is present in the head of an animal that is sent to a State health department when a dog has bitten a person.

RABIES DETECTION

We are exploring this now to find out if it might be possible to obtain a sample of saliva from the biting animal and, by using this technique, to detect the presence or the absence of the rabies virus in the saliva shortly after the dog has bitten a person. Thus, it will not be necessary to wait for the period of time that is required in the present technique for the classical development of rabies. We have developed the fluorescent antibody technique now for about 50 disease organisms to the point where we are about ready to go out into the State laboratories for tests.

We also will hold courses for State laboratory personnel. We have one scheduled in July which is being subscribed to heavily by State health department people. We will lay out the technique for them so they might go back to their laboratories and begin working on it, too.

1959 REPORT

Senator HILL. In the report of this committee for the present fiscal year we made the following statement:

This recommended increase would also provide \$375,000 to permit the Communicable Disease Center to intensify the work on the development of the fluorescent antibody technique in laboratory diagnosis, a technique which offers quicker, more accurate diagnosis for infectious diseases, for use by health departments, physicians, and laboratories.

Now will the funds in this bill, as they are now carried, be sufficient to carry on this work?

Dr. ANDERSON. Yes; we believe that we can make considerable extension of our work, within our capacity to expand it this coming year, with this amount of money.

Senator HILL. What about your other activities?

WORK ON VIRUSES

Senator MONRONEY. Before you leave this item, may I ask this question:

Is there any chance of this being expanded to take in the identification of germs causing the common cold?

Dr. ANDERSON. We are developing it for polio viruses, and we believe that it can be developed for any germ which causes disease and

produces an antibody within the body of the infected person or animal. So we believe it could be developed for the viral diseases causing the common cold.

Senator MONRONEY. As I understand it, today there are so many different types that they have never been able to isolate any major type in order to bring about antibiotic treatment that might be generally effective?

Dr. ANDERSON. Yes, sir. In fact, the use of the fluorescent antibody technique is going to be of great benefit to research workers because it will give them a much more efficient and, I believe, an economical way of making some of these examinations.

Senator MONRONEY. Our economic losses as a result of the common cold constitute one of our major economic losses from disease; is that not so?

Dr. ANDERSON. Yes, sir. The man-days lost from the common cold are terrific. I do not have the figures at hand.

Senator HILL. And it is one that we all suffer from, Senator. I am glad you asked that question.

Senator MONRONEY. Thank you.

DEVELOPMENT OF APC VACCINE

Dr. BURNEY. I think you would be interested in hearing of a problem that Dr. Shannon will enlarge on. It is a vaccine developed at NIH on one of the common varieties—I believe it is called APC—which is one group of viruses that produce certain symptoms of the common cold; but, as you have already indicated, there are a series of them and we will probably have to have a number of vaccines to protect us against all of them.

Senator MONRONEY. What about a common vaccine covering several of these virus groups? That might be effective if you cannot further isolate these major causes of the plague.

Dr. ANDERSON. Then, Senator, something like a variation in the viruses will occur, as it did with the influenza virus last year, and we will have a brand new virus causing disease against which the vaccines we have do not work.

Senator MONRONEY. Then the germs are about as smart as the scientists.

AMOUNT FOR PULMONARY STUDIES

Senator HILL. Doctor, this is correct, I believe; is it not—that the Department asked for \$83,900 for pulmonary mycosis studies. Was that allowed by the budget?

Dr. ANDERSON. Our pulmonary mycosis studies? I can tell you a little bit about that. In the Central Valley of the United States, starting from the Oklahoma-Kansas border and going east to the Maryland-Delaware-Virginia area, shading off both above and below that is a condition called histoplasmosis. This is an infection, a fungus infection, or mycosis, which infects up to 100 percent of the people in these areas.

RESEARCH ON FUNGAL DISEASES

In the California-Arizona area there is another infection called coccidioidomycosis, which is another fungal disease which affects large numbers of people out there.

These fungi are found in the soil of certain areas, coccidioidomycosis in the desert soil, and in the soil of roosts of fowl and birds in the case of histoplasmosis. These diseases are very difficult to treat. We do not know how to prevent them. Recently, one of the pharmaceutical laboratories in the country developed a new drug called amphotericin B, which offers the first promise in treating these mycotic infections of the lungs, which simulate tuberculosis. We are beginning work with about 30 State TB hospitals, Senator Hill, to evaluate the effects of this treatment, just as we evaluated the effect of antibiotics in the treatment of syphilis and the effect of isoniazid in the treatment of tuberculosis.

Senator HILL. Are there any other questions?
If not, we appreciated your testimony very much.
I will have to correct the record. I spoke of antiseptic methods against the staphylococcus infections diseases and now I see you have corrected me when you said "antibiotics."
Dr. ANDERSON. Well, the antiseptics still kill the organism.
Senator HILL. But you lose a lot of the effect of the antibiotics?
Dr. ANDERSON. Yes.
Senator HILL. We thank you.

SANITARY ENGINEERING ACTIVITIES

STATEMENT OF MARK D. HOLLIS, CHIEF, DIVISION OF SANITARY ENGINEERING SERVICES; ACCOMPANIED BY WESLEY E. GILBERTSON, ASSISTANT CHIEF, DIVISION OF SANITARY ENGINEERING SERVICES; DR. ALBERT L. CHAPMAN, CHIEF, DIVISION OF SPECIAL HEALTH SERVICES; DR. FRANCIS J. WEBER, CHIEF, DIVISION OF RADIOLOGICAL HEALTH; DR. DAVID E. PRICE, CHIEF, BUREAU OF STATE SERVICES; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For expenses, not otherwise provided, necessary to carry out those provisions of sections 301, 311, 314(c), and 361 of the Act relating to sanitation and other aspects of environmental health, including enforcement of applicable quarantine laws and interstate quarantine regulations, and for carrying out the purposes of the Acts of July 14, 1955 (42 U.S.C. 1857-1857f), and July 9, 1956 (33 U.S.C. 466-466d, 466f-466k), including \$2,700,000 for grants to States and \$300,000 for grants to interstate agencies, purchase of not to exceed [nine] four passenger motor vehicles for replacement only; [and the] hire, maintenance, and operation of aircraft; [\$12,815,000] and purchase, erection, and maintenance of portable buildings; \$14,275,000 to remain available only until June 30, [1959] 1960."

Amounts available for obligation

	1959 appro- piation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$12, 815, 000	\$14, 275, 000	\$14, 590, 000
Proposed supplemental due to pay increases.....	441, 000		
Comparative transfer to other accounts.....	-39, 000		
Total obligations for annual program.....	13, 217, 000	14, 275, 000	14, 590, 000

Obligations by activities

	1959 appro- piation		1960 budget estimate		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
ACTIVITIES						
1. Air pollution.....	218	\$4,012,200	236	\$4,212,200	236	\$4,212,200
2. Water supply and water pollution control.....	419	6,738,800	419	6,787,800	439	7,102,800
3. Radiological health.....	76	634,100	141	1,439,100	141	1,439,100
4. Milk and food sanitation.....	58	511,500	58	512,300	58	512,300
5. Interstate carrier and general sanitation.....	70	536,600	70	537,600	70	537,600
6. SEC research services.....	66	463,900	66	465,300	66	465,300
7. Administration.....	42	319,900	42	320,700	42	320,700
Total obligations for annual program.....	949	13,217,000	1,032	14,275,000	1,052	14,590,000

Obligations by objects

	1959 appro- piation	1960 budget estimate	1960 House allowance
Total number of permanent positions.....	949	1,032	1,052
Full-time equivalent of all other positions.....	40	40	41
Average number of all employees.....	933	1,006	1,022
Number of employees at end of year.....	1,052	1,140	1,160
01 Personal services.....	\$6,457,400	\$6,997,400	\$7,119,000
02 Travel.....	568,200	679,400	709,200
03 Transportation of things.....	62,500	76,300	77,800
04 Communication services.....	84,900	97,100	98,100
05 Rents and utility services.....	53,700	60,700	63,700
06 Printing and reproduction.....	93,000	113,000	114,500
07 Other contractual services.....	176,300	193,500	201,100
Services performed by other agencies.....	650,100	672,100	811,700
Research contracts.....	532,600	742,600	742,600
08 Supplies and materials.....	212,500	239,500	240,000
09 Equipment.....	150,400	197,000	199,500
10 Lands and structures.....		10,000	10,000
11 Grants, subsidies, and contributions.....	4,141,200	4,158,200	4,164,200
13 Refunds, awards, and indemnities.....	600	1,600	1,600
15 Taxes and assessments.....	33,600	36,600	37,000
Total obligations for annual program.....	13,217,000	14,275,000	14,590,000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	956	\$12,815,000
1959 supplemental appropriation.....		441,000
Total appropriation.....	956	13,256,000
Comparative transfer to other accounts.....	7	-39,000
Revised 1959 base.....	949	13,217,000
1960 appropriation request.....	1,032	14,275,000
Net change requested.....	+83	+1,058,000

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases:				
For mandatory items:				
Extra day's pay (261 days in 1959 and 262 days in 1960).....		\$14, 700		\$14, 700
Annualization costs for 25 additional positions authorized in 1959 (1959 authorized for 80 percent of year).....		30, 800		30, 800
Subtotal.....		45, 500		45, 500
For program items:				
For expansion of air pollution automobile exhaust studies.....	18	197, 000	18	197, 000
For strengthening enforcement of interstate water pollution control.....		43, 000		43, 000
For expansion of the radiological health program.....	65	772, 500	65	772, 500
For expansion of the Arkansas Red River water quality conservation project.....		0	20	315, 000
Total change requested.....	83	1, 058, 000	103	1, 373, 000

New positions requested, fiscal year 1960

	Grade	Annual salary
Air pollution:		
Engineer.....	GS-13.....	\$11, 107
Scientist (2).....	GS-13.....	22, 214
Scientist (2).....	GS-12.....	19, 094
Scientist.....	GS-11.....	8, 237
Engineer.....	GS-11.....	8, 237
Research technician.....	GS-7.....	4, 992
Engineering assistant (2).....	GS-5.....	8, 112
Laboratory technician (2).....	GS-4.....	7, 530
Statistical clerk.....	GS-4.....	3, 765
Animal caretaker.....	GS-3.....	3, 515
Commissioned officers:		
Senior grade.....		12, 296
Full grade.....		8, 305
Senior assistant grade (2).....		12, 540
Total, 18 new positions.....		129, 944
Deduct lapses.....		28, 044
Net cost.....		101, 900
Radiological health:		
Information specialist.....	GS-14.....	\$11, 357
Scientist (3).....	GS-13.....	30, 450
Scientist.....	GS-12.....	8, 819
Program publication specialist.....	GS-12.....	8, 341
Administrative officer.....	GS-11.....	7, 030
Statistician.....	GS-11.....	7, 030
Scientist (3).....	GS-9.....	18, 594
Clerical assistant.....	GS-6.....	4, 493
Research technician (2).....	GS-5.....	8, 112
Clerical assistant (5).....	GS-5.....	20, 280
Clerical assistant (13).....	GS-4.....	48, 945
Laboratory technician.....	GS-4.....	3, 765
Commissioned officers:		
Director grade (4).....		45, 824
Senior grade (10).....		104, 000
Full grade (11).....		92, 321
Senior assistant grade (3).....		24, 258
Assistant grade (4).....		19, 268
Total, 65 new positions.....		462, 887
Deduct lapses.....		77, 087
Net cost.....		385, 800
Total 83 new positions, all activities.....		592, 831
Deduct lapses.....		105, 131
Net cost.....		487, 700

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$315,000 for sanitary engineering activities. As the Secretary indicated this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

This increase was directed in the House committee report toward the Arkansas-Red Rivers water quality conservation project, which is developing a plan for restoring and conserving a quality of water suitable for current and future municipal, industrial, and farm supplies in the streams and impoundments of these river basins. At present the project, with a budget of \$85,000 per year, is making limited progress in gathering the necessary detailed information about the man-made and natural pollution of the river systems. The increase would be applied to expediting this phase of the work, and to making available at an earlier date at least part of the analyses and conclusions that are needed in the planning of the \$1.5 billion of Federal water management construction already authorized for the area.

As stated by the Secretary when he appeared before the committee such an increase would further contribute to inflation and weakening of the national economy. The Department has recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

Allocations of grant-in-aid funds for water pollution control

State or Territory	1958 alloca- tions	1959 alloca- tions	Esti- mated 1960 alloca- tions	State or Territory	1958 alloca- tions	1959 alloca- tions	Esti- mated 1960 alloca- tions
Alabama.....	\$59,100	\$57,800	\$56,800	Nevada.....	\$13,700	\$13,900	\$14,000
Alaska.....	15,400	15,300	13,800	New Hampshire...	23,400	23,600	23,700
Arizona.....	22,500	23,300	23,500	New Jersey.....	75,600	77,400	78,200
Arkansas.....	41,500	40,000	39,200	New Mexico.....	21,000	21,100	20,900
California.....	127,100	132,900	133,700	New York.....	173,900	166,400	164,800
Colorado.....	28,400	28,900	29,000	North Carolina...	77,000	76,200	76,100
Connecticut.....	45,900	46,600	46,700	North Dakota.....	20,500	20,100	19,900
Delaware.....	29,400	29,400	29,600	Ohio.....	110,200	110,800	110,700
District of Colum- bia.....	32,000	31,600	31,600	Oklahoma.....	38,700	38,800	38,700
Florida.....	53,600	56,600	59,400	Oregon.....	29,700	30,100	30,100
Georgia.....	62,200	62,000	61,500	Pennsylvania.....	134,100	132,100	131,000
Idaho.....	19,300	19,300	19,400	Rhode Island.....	36,000	36,200	36,400
Illinois.....	110,000	109,400	110,600	South Carolina...	50,300	50,500	50,600
Indiana.....	63,700	64,800	64,800	South Dakota.....	20,800	20,800	20,700
Iowa.....	44,400	44,800	45,300	Tennessee.....	61,900	61,100	60,200
Kansas.....	34,800	34,900	34,800	Texas.....	103,000	103,800	104,700
Kentucky.....	54,900	54,400	54,300	Utah.....	21,300	21,600	21,700
Louisiana.....	52,600	52,200	51,500	Vermont.....	19,600	19,500	19,400
Maine.....	24,900	24,900	25,000	Virginia.....	57,100	57,100	58,400
Maryland.....	50,000	50,200	50,700	Washington.....	38,200	38,500	38,900
Massachusetts.....	77,000	75,000	74,100	West Virginia.....	42,200	41,300	39,800
Michigan.....	90,500	94,600	95,500	Wisconsin.....	61,100	60,200	60,500
Minnesota.....	49,600	49,000	49,000	Wyoming.....	15,000	15,000	15,000
Mississippi.....	50,100	50,200	49,900	Hawaii.....	24,000	24,400	24,900
Missouri.....	59,000	57,900	57,300	Puerto Rico.....	61,100	60,200	60,200
Montana.....	18,000	18,300	18,500	Virgin Islands.....	26,800	26,900	26,900
Nebraska.....	27,900	28,100	28,100	Total.....	2,700,000	2,700,000	2,700,000

PROGRAMS UNDER DIVISION

Senator HILL. Our next subject is "Sanitary engineering activities."

Mr. Hollis, do you want to address yourself to this subject now?

Mr. HOLLIS. Mr. Chairman, I have a statement, that I will brief down, if you wish.

Senator HILL. All right, you may proceed.

Mr. HOLLIS. The programs covered in the appropriation, "Sanitary engineering activities," deal with the programs of air pollution, water pollution, radiological health, milk and food, and general sanitation, as well as our direct operation on the sanitation of interstate carriers, that is, airplanes, trains, buses, and ships.

These all deal with man's environment and the changing environment. More specifically they deal with those elements of the environment that are more prone to contamination, that is, the water we drink, the air we breathe, and the food we eat.

The public is inclined to take for granted the availability and good quality of these basic necessities, but in our complex society, more and more it is becoming increasingly difficult to keep environmental contamination within such limits as man can endure without serious consequence to his health and well-being.

This problem goes beyond the biological contaminants, that is, the contaminants of germs causing disease. We now deal with the non-biological contaminants—the chemical contaminants, and radioactive pollution that result from our modern technology.

ABATEMENT OF POLLUTION

The abatement of this pollution is, theoretically, purely a local correctional problem, but it is never quite that simple. While specific regulatory measures are the responsibility of State and local subdivisions, the broad problem goes beyond the mere issuing of orders that the pollution be stopped.

To begin with, there is no single pollution problem, but a multiplicity of problems that result in the total complex contamination of the environment.

In fact, the atmosphere over cities, and the Nation's rivers and streams themselves become giant test tubes in which contaminants act and react with each other and often form new products and new substances.

INCREASE REQUESTED FOR AIR POLLUTION WORK

Very briefly, in air pollution, we propose to move ahead with the program we now have well underway. We intend to emphasize next year the long-term health effects of community air pollutants, and to put some special emphasis on auto-exhaust emissions, and the effect and behavior of auto exhausts in our overall air pollution problem.

There is a \$200,00 increase in our estimate for this study.

WATER POLLUTION

In water pollution, we are going to press forward on the program that is now underway, under Public Law 660, with emphasis, special emphasis on our national water monitoring network.

This is a network of sampling stations that we believe will give us a good measure on the behavioral trends in the pollution of surface waters. This network is beginning to provide the necessary base line data with which State agencies and others can correlate similar information to round out the needed technical background for enforcement actions and other remedial measures.

Senator MONRONEY. Could I ask a question there?

Senator HILL. Senator Monroney.

Senator MONRONEY. During consideration of the construction of Chantilly Airport they had a very serious sewage disposal problem, because it is above the water supply for several cities.

General Quesada was advised of a possible treatment of sewage on a large scale by radioactive materials.

I just wondered if there is any research going on in that respect in cooperation with the Atomic Energy Commission to find other ways whereby sewage can be treated rapidly and made perfectly safe for further disposal?

PROBLEM OF NONBIOLOGICAL POLLUTANTS

Mr. HOLLIS. There is some work going on, mostly at universities. In our Cincinnati facility we are probing into this somewhat. The problem here is, it would not be too difficult to take care of living organisms in the sewage, but the use of radioactive isotopes would not normally provide reduction in the organic pollution of sewage.

Senator MONRONEY. As I remember, it involved subjecting the sewage to intense heat which could only be obtained through some type of atomic pile.

Mr. HOLLIS. Yes. With an unlimited heat source, two things could be done: either evaporate the moisture and burn the solid material, or provide complete sterilization. To convert this into practical application at the moment would be difficult. Also, there is another factor; the possibility that whatever residual discharge reaches the stream might itself become radioactive. In other words, you might wind up with a contaminant that is worse even than the waste that you begin with.

Senator MONRONEY. But some studies are going on in that direction, with a possible use of atomic heat and isotopes?

Mr. HOLLIS. Yes, sir; and we believe with these new sources of energy—whether used to produce cheap electricity or used directly—provide a basis around which to develop new methods for treatment of waste that will do a much better job than present methods. Certainly, improved methods will be needed as population concentrates. Preliminary work on much of this is underway at our Cincinnati laboratory, with the facilities we have available.

Senator MONRONEY. Thank you.

Senator HILL. Mr. Hollis, the House allowance was \$315,000 over the budget estimate. Would you advise us what that \$315,000 would be specifically expended for?

CONTROL OF BRINE POLLUTION

Mr. HOLLIS. This, Mr. Chairman, is to accelerate our research and field work on the Arkansas and Red River basin watershed. This work was started in 1958. The objective was to locate, if we could, the

principal sources of pollution, especially the heavy brine pollution in this basin and to develop practical measures of control, perhaps by dilution, or perhaps by other means. We believe the pollution can be kept within reasonable limits.

This basin, as you so well know, Senator Monroney, takes in major segments of Oklahoma, Texas, Kansas, Arkansas, Louisiana, and to a lesser extent Colorado and New Mexico. This is an area of the country that has limited rainfall, an area in which water is at a premium.

Our early probing into this problem reveals that high percentages of the salt brine pollution—which, incidentally, from some sources runs 10 times the salinity of sea water, to give you some magnitude of the quantity—comes from a few sources. We believe that by locating these sources and by developing water control works, that is, the water regulation works in the basin, we can limit the harmful effects of a high percentage of the salt. For example, retain it in impoundments and discharge it during floodflows, and in this way to protect the stream during the normal flows of the year, and to make the water more usable.

At present this study is operating at a level of \$85,000 per year. At this level it would take 8 to 10 years to complete. In view of the early findings, the Army Engineers, and other construction agencies were interested in speeding up the study in order to use the data to design into the work they are developing for that watershed.

Senator HILL. With these additional funds you can expedite it?

Mr. HOLLIS. We think we can; yes, sir, and put it on a schedule of about 3 to 4 years.

Senator HILL. That is, instead of a schedule of 8 to 10 years?

Mr. HOLLIS. Yes, sir.

BRINE IN SOUTHERN RIVERS

Senator MONRONEY. Was it not in Texoma Lake that you found almost 80 percent of the salt content running into the lake from Red River came from two sources: One, a small creek in Harmon County, Okla., that could be easily controlled once identified, thus avoiding the production of tens of thousands of tons of salt a day; and another from a small creek running through Wichita Falls. As I recall the figures, this would eliminate about 80 percent of the saline content that caused the damage, making this vast body of water unusable for irrigation or drinking water or municipal water supply.

Mr. HOLLIS. That is right. As a matter of fact, current figures indicate about 90 percent of salt is from Lake Texoma. The Red River at Freeport, La., has some 5,500 tons a day.

In a similar way, by way of further example, the Arkansas River at Van Buren has over 20,000 tons of salt per day in its flow past that point. Over 30 percent of this is from three sources, three tributaries.

Senator MONRONEY. Where are those tributaries?

Mr. HOLLIS. The Cimarron, Salt Fork, and the Canadian Rivers. There are two sources of salt pollution, and one is manmade largely from the oilfields. Brine from this source can be returned to the ground.

Senator MONRONEY. The State has passed laws requiring nonpollution from that source, so I believe that has been taken care of.

Mr. HOLLIS. That is right. The other source is natural pollution.

For example, there are some springs, salt springs, located in the upper tributaries that contribute brine 10 times the concentration of sea water. Many of these can be walled off.

Senator MONRONEY. I think this is a very profitable investment because it makes possible water storage and utilization which are thousands of times more valuable than the cost of this study.

Senator BIBLE. May I ask one question concerning my own thinking on this problem?

ACTION UNDER HOUSE ALLOWANCE

As I understand it, the level of the appropriation for this activity now is \$400,000, as a result of the House action; is that correct?

Mr. HOLLIS. That is correct.

Senator BIBLE. Now, if it is maintained at a rate of \$400,000 annually, you contemplate the project will be completed in approximately 4 years?

Mr. HOLLIS. Within 4 years; maybe within 3½.

Senator BIBLE. And that is at an annual appropriation level of \$400,000?

Mr. HOLLIS. Yes, sir.

Senator HILL. And unless you get the \$400,000, it may take you from 8 to 10 years to do the job?

Mr. HOLLIS. Yes, sir.

PREPARED STATEMENT

Senator HILL. Your statement will appear in full in the record at this point, Mr. Hollis.

(The statement referred to follows:)

STATEMENT OF CHIEF, DIVISION OF SANITARY ENGINEERING SERVICES, PUBLIC HEALTH SERVICE, ON SANITARY ENGINEERING ACTIVITIES

Mr. Chairman and members of the committee, this appropriation covers the primary activities of the Public Health Service in the field of sanitary engineering and environmental health—air pollution, water supply and water pollution control, radiological health, milk, food, and shellfish sanitation, inspection of interstate carriers, and general sanitation services. The basic objective common to these programs is to provide specialized assistance in support of State and local health departments and of water and air pollution control agencies. Program emphasis is on research, technical assistance, and training—with special attention to new problems. Population growth, economic development and industrial expansion are rapidly broadening the health hazards of the environment to include, in addition to bacteria, viruses, and other infectious agents, a wide range of “nonliving” contaminants, such as radiation, chemical conglomerates, fumes, and other byproduct wastes. These pollutants adversely affect our air, water, and food resources, and the rate of buildup raises significant questions about future health effects. Our modern life is increasingly more dependent upon satisfactory technical and administrative solutions to these problems inherent in our highly developed urban areas.

With the exception of direct Federal activities on interstate matters, the fundamental responsibility for regulatory control of environmental health problems rests upon State and local governments. By far, the bulk of the effort and resources comes from these and private sources. However, these problems are broad in scope and involve the national interest.

The estimate for this appropriation for fiscal year 1960 is \$14,275,000, an increase of \$1,058,000 over the current fiscal year. The recommended increases

are principally for specific activities of two programs: auto exhaust problems in air pollution, and health assessment of radiation exposure. The other programs are submitted essentially at the same fund level as for fiscal year 1959.

AIR POLLUTION

With respect to air pollution, fiscal year 1960 will be the final year of the current authorization for funds for air pollution research and technical assistance under Public Law 159. During the period since enactment of that legislation, significant progress has been made. Research activities, in both medical and engineering fields, have been developed from a negligible level to a point where the results of at least some of the investigations are now being applied in control programs. Air pollution training courses have been initiated in 14 universities. Several city, regional, and statewide comprehensive air pollution surveys have been conducted at the request of official agencies, as a basis for undertaking control programs; and in addition a much larger number of technical assistance projects were carried out. More than one-half of the States now have some legislation dealing specifically with air pollution. In total, however, air pollution problems are growing in scope and complexity and we must assume that this trend will continue as our industry, our population, and our transportation grow.

In November 1958, the Surgeon General called a national conference of outstanding authorities in the field of air pollution to review and evaluate where the Nation stands with respect to effective air pollution control, knowledge of the effects of air pollution, what still needs to be done, who should do it, and how much it would cost. Two major highlights of that conference were recommendations concerned with the increasing importance of automobile exhaust as an uncontrolled contaminant, and the increasing concern over the long-term health effects of exposure to air pollution. To a considerable extent, our 1960 program is focused upon these two problems. We are requesting an increase of \$200,000 for auto exhaust studies and mandatory increases in which emphasis will be placed on determining both the short-range and long-term effects of auto exhaust upon the health of man, as well as the extremely complex chemical and physical reactions of auto exhaust with other atmospheric contaminants under ultraviolet or sunlight radiation.

From the standpoint of health effects, marked statistical associations between air pollution and many forms of heart disease and cancer have been noted.

Although auto exhaust has sometimes been considered to be important only in cities on the west coast, especially Los Angeles, current evidence indicates that it is an increasing problem throughout the country. Auto exhausts have been demonstrated to contain cancer-producing substances, to contain materials which produce eye irritation, and to contain materials which result in extensive crop damage.

Since there is statistical evidence that air pollution contributes to deaths from certain types of heart disease and cancer, there is need to clarify the role of auto exhaust in this picture as well as evaluate other adverse health effects and physiological changes which may occur as a result of acute exposure and lifetime residence in urban atmospheres.

The new studies proposed for 1960 will concentrate upon initiation of the following types of investigations:

First, exposure of animals to automotive exhaust, which will involve the continuous exposure of a controlled animal colony to a realistic community level of typical automotive exhaust irradiated by artificial sunlight.

The purpose of this study will be to evaluate the role of auto exhaust in causing or contributing to ill health, changes in physiological status and mortality from various diseases, including cardiac and pulmonary conditions, and changes in body tissues, which may include cancer.

Second, an investigation of eye irritation phenomena. Little is really known about the eye irritation frequently encountered in Los Angeles and which is being increasingly reported elsewhere. Some individuals are particularly susceptible, some react only occasionally, and others apparently never. There is so little clinical or physiological data available that the possibilities of serious side-effects of long-range damage cannot be disregarded. Eye irritation is a source of civic concern and apprehension. In part, this study can be conducted under the same experimental conditions as in the first study, by evaluating eye irritation and injury to exposed animals. Another phase will involve short-term exposures to higher levels of auto exhaust in an attempt to determine the levels

at which measurable effects are produced and to explain the basic physiological mechanisms involved.

Third, to develop biological indicators of automotive exhaust pollution intensity. It has been experimentally demonstrated that auto exhausts cause specific types of plant damage and also kill or inhibit the growth of certain bacteria under laboratory conditions. These findings will be utilized in field studies which will compare the geographic distribution of auto exhaust-type plant damage with the variations of mortality and morbidity within cities.

Fourth, appraisals of gasoline additives. In addition to tetraethyl lead, other substances are now being added to gasoline. Most of these new materials have not been tested for their possible health or other effects. They may be directly harmful, or they may modify the chemical nature, and therefore the effects, of other exhaust substances.

Finally, analytical and engineering research into the chemistry and control of auto exhausts will be required. The biological studies previously outlined will utilize air pollution materials secured from the facility for irradiating automobile exhaust which is now being installed at the Sanitary Engineering Center in Cincinnati. This equipment will also be used in connection with research on sampling methods and analytical techniques for automobile exhausts. Fundamental studies of control procedures will be undertaken also. For example, promising catalysts developed by the Bureau of Mines under contract with the Public Health Service will be tested at this facility. The effects of various gasoline additive and fuel injection systems on exhaust characteristics and control procedures will also be studied.

Although the preceding discussion has highlighted the auto exhaust problem, other essential activities in air pollution research, training and technical assistance must be continued. Our basic objective is to work out sound information, on which control procedures and programs can be based, and to provide these data as early as possible to the States and communities and to industry.

WATER SUPPLY AND WATER POLLUTION CONTROL

The closely related problems of water supply and water pollution control continue to be of regional and national concern. The need for water to sustain our national economy is increasing at an unprecedented rate. Water pollution parallels metropolitan and industrial growth. The Public Health Service program has two primary objectives: (1) to assist the States, interstate agencies, municipalities, and industry in controlling pollution through every known means; and (2) to conduct and encourage research to develop new approaches and new methods essentials to meet changing problems that go beyond the scope of present knowledge.

In general, the program for fiscal year 1960 proposes to carry forward the activities now underway. The increase of \$49,000 for this item will be used to follow through on interstate enforcement actions now in progress.

Following are six examples which will illustrate the types of work undertaken:

(1) Good progress is being made in the abatement of serious interstate pollution through enforcement. Since passage of the Federal Water Pollution Control Act in 1956, 11 enforcement actions involving 17 States and the District of Columbia, 95 cities, and 138 industries have been instituted. As a result of these actions, construction schedules have been established which will correct each of these interstate pollution situations by 1968. The cost to the cities and industries concerned will approximate \$500 million.

(2) Grants for the construction of municipal waste treatment works, which are carried in a separate appropriation, stimulated the annual rate of construction from an average of \$250 million to more than \$350 million in 1957. In 1958 the rate will approach \$400 million—still short, however, of the \$500 million annual rate authorities generally agree is necessary.

(3) Program grants are helping the State and interstate agencies to undertake research and investigations necessary to cope with many new and complex problems which are peculiar to their areas.

(4) Research, training, and technical assistance carried out through the Public Health Service's regional offices and the engineering center at Cincinnati serve to aid the States on complex problems involving special competencies and facilities. Through such scientific consultations, technical studies, and short training courses, the highly specialized skills of experts can be spread over a larger area of the problem.

(5) The national water network is designed to gather specialized information on water quality trends from a limited number of sampling points at strategic locations. It provides baseline data with which State agencies and others can correlate similar information, so as to round out the needed technical background for enforcement action, regulatory activities and advance planning for water resource development. Implementation of the network program is under way and is planned for the same level (about 50 stations) in fiscal year 1960. The activity also includes an inventory of vital information on water supply and waste disposal facilities. The cooperative network is soundly established on a going concern basis and will soon begin to indicate national pollution trends.

(6) The growing number of requests for information from both lay and professional national organizations together with the attention the subject is receiving in both the lay and technical press reflect an increasing public concern over water pollution. Every effort is being made by the Public Health Service and the States to disseminate technical information in an understandable form.

RADIOLOGICAL HEALTH

The possibility of serious consequences to the health of the citizens of the Nation, should we fail to take adequate preventive and control measures in the face of the increasing levels of radiation exposure of the population, cannot be overemphasized. Much has been done, within the limits of available resources, in the development and initiation of needed programs, but the work to date represents only the barest beginning and it is essential that we move forward rapidly with further development and application of needed radiological health programs.

Evidence is increasing that exposures of the population to ionizing radiation, at levels previously thought safe, are, in fact, injurious. The results of exposure may be divided into acute effects resulting from relatively large exposures to radiation, and long-term effects of repeated small or chronic low-level exposures, the results of which are cumulative. It is the latter with which we are most concerned, since the levels of exposure of the population are constantly increasing with the rapid growth of sources of radiation.

Because radiation effects are cumulative and irreversible and because of increasing levels of radiation exposure of the public from all sources, including medical and dental X-rays, industrial applications of radiation-producing devices and nuclear energy, and worldwide weapons tests, it is most urgent that there be no delay in the further development and application of measures to protect the public health from radiation hazards. The relative roles of the Public Health Service and the Atomic Energy Commission in this endeavor have been the subject of some questions in the past. Staffs of the two agencies have been and continue to work closely together to assure that their efforts complement rather than duplicate each other. Specifically, in relation to fiscal year 1960, the program proposals reflected by this budget were fully discussed by the PHS and AEC staffs and agreement reached concerning them. An increase of \$805,000 is requested to enable the Service to carry out its responsibility in this field.

The funds appropriated for this program will be utilized to—

(1) Continue and intensify the investigative efforts of the Service designed to provide data necessary to the proper design of preventive and control programs. Included will be studies of the radioactivity levels in the environment, particularly air, water, and foods such as milk, employing the most recently developed laboratory methods. Also emphasized will be epidemiological investigations to develop more precise knowledge of the harmful effects of radiation to man under various conditions of exposure.

(2) Provide States and localities with more adequate technical assistance in the development and conduct of their programs in radiological health in order to assist them to build up their capabilities in the radiological health field. Long experience by the Service has demonstrated that one of its most valuable roles is that of assistance to States and local health organizations in the conduct of their programs. This will be continued and intensified in radiological health by the assignment of trained Service officers to selected State and local offices and to DHEW regional offices, supplemented by a few specialists at headquarters. In addition, guidelines will be developed further and refined for use by States and localities in de-

veloping necessary legislative and regulatory proposals, health codes, and organization and operation of radiological health programs.

(3) Provide training of technical and professional health personnel in order to reduce the serious National, State, and local deficiency of personnel with the specialized knowledge required for effective work in radiological health. One approach to this problem will be through expansion in the number and frequency of short-term topical courses offered by the Service in such subjects as radioactive pollutants in air, radioactive pollutants in water, radiation protection, and environmental health aspects of nuclear reactor operations. These courses are open to professional personnel at various levels of government and, in appropriate instances, from other organizations and industry. Graduate academic training will be provided a limited number of career Service officers. In addition, Service experience in radiological health training will be utilized in assisting State and local health agencies in development and conduct of their own training activities through appropriate technical consultation.

OTHER ACTIVITIES

We have stressed the vital need for modernized programs to cope effectively with environmental problems emerging in the fields of water and air pollution and radiation. We hasten, however, to correct any possible impression that basic sanitation problems in milk and food protection and interstate carrier sanitation are any less demanding than in previous years.

Prevention of milk- and food-borne diseases continues to become more complex with our rapidly changing technology and changing patterns of population distribution, and is primarily dependent upon the day-to-day control efforts of State and local health agencies. Our program is designed to provide leadership and hard-core technical assistance needed by States to cope with problems which, though local in nature, are nationwide in scope and impact. Program activities consist of research and field investigations, development of uniform standards and control methodology, provision of technical assistance in the application of public health procedures, and, in cooperation with the States, conduct of programs for certifying the sanitary quality of fluid milk and raw shellfish shipped interstate.

The estimate for interstate carrier sanitation provides for the discharge of the direct statutory responsibilities in the conduct of the national program of sanitation for all interstate carriers—airplanes, railroads, vessels, and buses, which carry more than 2 million passengers daily. The volume of interstate travel continues to increase each year, bringing with it changes in design of conveyances and in techniques of food service. In light of these factors, the Public Health Service activities have been redirected to concentrate existing resources on eliminating health hazards in the design and construction of equipment and conveyances used by interstate carriers. In recent years, it has been feasible to do spot checking only of the operating conveyances.

Also, through this program we provide needed technical assistance to State agencies and others on a wide range of general sanitation problems including those resulting from the rapid growth of suburban areas.

In summary, the estimates for this appropriation total \$14,275,000, an increase of \$1,058,000. Of this increase, \$200,000 is for air pollution, \$49,000 for water pollution, and \$805,000 for radiological health.

Mr. Chairman, Dr. Albert L. Chapman, Chief of the Division of Special Health Services, Dr. Frank Weber, Chief of the Division of Radiological Health, and I shall be glad to answer such questions as the committee may have concerning these programs.

ARKANSAS-RED RIVER BASIN PROJECT STUDY

Senator HILL. Senator Monroney has received a letter from Dr. G. F. Mathews, commissioner of health for the State of Oklahoma, urging the appropriation of sufficient funds to enable the Public Health Service to continue the study of the Arkansas-Red River Basin project. An identical letter was addressed to Senator Kerr. Dr. Mathews' letter will be included at this point in the record.

(The letter referred to follows:)

STATE DEPARTMENT OF HEALTH,
STATE OF OKLAHOMA,
Oklahoma City, Okla., March 2, 1959.

HON. MIKE MONRONEY,
Member, U.S. Senate,
Senate Office Building, Washington, D.C.

DEAR SENATOR MONRONEY: This is to call your attention to the importance with which I regard the water quality basic data studies being carried out in Oklahoma by the Public Health Service. I therefore wish to recommend that these studies be continued in the future and that, if necessary, sufficient funds be appropriated during the current session of Congress to continue the programs in Oklahoma. The programs referred to are:

- (1) The Arkansas-Red River water quality conservation project.
- (2) The evaluation program being carried on in Oklahoma by the Corps of Engineers under the provisions of the Water Supply Act of 1958.
- (3) The water quality basic data program being carried on in Oklahoma by the Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio.

The information already obtained by the Public Health Service regional office in Dallas in carrying out the Arkansas-Red River Basin water quality conservation project has been most enlightening, and I feel this as well as the others mentioned will provide the essential basic data which will be highly important in future planning and in obtaining the most beneficial use of Oklahoma waters, including of course water supplies for domestic use which is of immediate concern to this department. The basic data information being obtained is of a type and character that has not heretofore been made available by any agency.

I would like to request that my comments as outlined herein be brought to the attention of appropriate committees of the 86th Congress.

Sincerely yours,

G. F. MATHEWS, M.D.,
Commissioner of Health.

PREPARED STATEMENT

Senator HILL. Senator Long has requested that his statement in support of an appropriation of \$400,000 for continuation of the Arkansas-Red River study be included in the record. The Senator has also requested that statements of Mr. L. R. Matthias, executive vice president of the Red River Valley Association and of Mr. Calvin T. Watts, assistant director of the State of Louisiana Department of Public Works be included. These statements, will be included at this point in the record.

(The statements referred to follow:)

STATEMENT OF SENATOR RUSSELL B. LONG OF LOUISIANA

Mr. Chairman, last year I was granted the privilege to testify before your committee in support of an appropriation of \$400,000 to permit the U.S. Public Health Service to conduct a water quality survey of the Red and Arkansas Rivers. I appreciated very much the consideration accorded me by this committee at that time and I was happy to note that the figure for which I testified was included in the bill that was passed by Senate. Unfortunately, the item was dropped in conference with the House of Representatives.

This year a number of my constituents appeared before the House of Representatives Appropriations Committee in behalf of this survey. I am happy to say that, after consideration, the item was included in the bill that was adopted by this committee.

It now gives me pleasure to appear once more before your committee and to request consideration of this item.

For many years, people in the Red River Basin felt they had an unlimited supply of water. Recent developments have indicated that the supply of this most necessary commodity is very limited, and the full exploitation of every source of supply is needed. This has been brought about largely by industrial development and increased uses for our water supply.

The question of water pollution has, as a result of this increasing need for water, become more and more of an urgent problem. It now becomes an absolute necessity that we look into those sources of water that, because of a high

concentration of chlorides and sulfides, previously had been considered not available to us. This is the purpose of this study. I again accordingly request that your committee give consideration to the retention of an appropriation of \$400,000 to the Department of Health, Education, and Welfare for continuing its study on water pollution in the Red River Basin. In this connection, I present herewith prepared statements from the executive vice president of the Red River Valley Association, and from the assistant director of the Department of Public Works of the State of Louisiana. It will be appreciated if these statements will be made part of the record in connection with this appropriation.

I also present to the committee a brief on pollution and health problems of Red River and tributaries submitted by the Wichita County Water Control and Improvement District No. 1 and Wichita County Water Improvement District No. 2. It is presumed that because this brief contains maps in color it cannot be inserted in the record. I hope that members may have the time to examine this document.

STATEMENT OF L. R. MATTHIAS, EXECUTIVE VICE PRESIDENT, RED RIVER VALLEY ASSOCIATION, SHREVEPORT, LA.

Mr. Chairman, to those of us who live in the Red River Basin, in the States of Oklahoma, Arkansas, Louisiana, and Texas, one of the most pressing and important problems is the development of our water resources for our people's daily needs, our ever-increasing industrial requirements, and our agricultural survival. Although this part of the country sees millions of acre-feet of water flow down the Red River through the four States each year, we find that we are starving for usable water, particularly in the upper reaches of the basin because of the quality of the water. The lack of quality water was perhaps most clearly demonstrated in the great drought of 1952-57. When it was evident the need for water was most critical, the quality was at its worst. On July 1, 1957, the Public Health Service, under authority of the National Water Pollution Control Act of 1956, initiated an investigation and survey of the causes, extents, kind of pollution, and possibilities of correctional measures for the waters of the Red River Valley. It is this problem and survey that we would like to discuss with the committee this morning.

It was soon apparent to the Public Health Service and to the people of the Red River Valley this was not an ordinary routine investigation of interstate pollution. But it was a problem of such magnitude that when solved it would yield tremendous benefits to the people of the area and to the Nation as a whole. Twenty-one months have now elapsed since the project was begun by the Public Health Service. To date, the only funds that have been made available for this survey, which is estimated to cost a total of \$900,000 are the \$85,000 appropriated last year and the \$85,000 appropriation within the operating budget of the Department of Health, Education, and Welfare this year. If we are to complete this survey and study within a reasonable period of time, and on a schedule within the capabilities of the Public Health Service, which is estimated to require at least 3 years, then it is apparent to us that additional funds will be necessary in order to meet the project schedule.

For the committee's reference, we are listing, as follows, the project schedule and fiscal year costs that will be required to complete this important study on an economical and expeditious program :

Project schedule

Fiscal year :	Activity
1958-----	Completion of phase I.
1959-----	Initiate phase II.
1960-----	} Completion of phase II.
1961-----	
1962-----	Completion of phase III.
1963-----	To be carried out by other State, Federal, and/or local interests.

Fiscal year :	Cost
1958-----	\$85,000 expended.
1959-----	\$63,000 expended.
1960-----	\$400,000 estimated need.
1961-----	\$400,000 estimated need.
1962-----	\$100,000 estimated need.

As you may readily see from the project schedule that the completion of phase III is scheduled for the fiscal year of 1962 and then the implementation of correctional measures will not be undertaken until the fiscal year of 1963. This means that there will be at least 4 years or possibly longer before any substantial relief can be given the people of the area in meeting their daily water needs.

We therefore urge this committee to increase the appropriation for the Department of Health, Education, and Welfare by \$400,000 for the fiscal year of 1960, and we ask that this amount be earmarked for the Red River Basin water quality survey. We also ask this committee that the entire program be considered during the fiscal years of 1961 and 1962, so that it may be completed as soon as possible and relieve the problem of the people in the Red River Basin by eventually making possible an abundant quality water supply for all of their needs.

For this committee's ready reference, we are attaching to our statement a summary of information compiled by the Public Health Service, outlining the problem, the purpose, the objectives and project schedules and costs.

SUMMARY OF INFORMATION, RED RIVER AND ARKANSAS DRAINAGE BASINS, WATER QUALITY CONSERVATION PROJECT

The problem

During the past decade and in particular, during the drought of 1952-57, numerous cities, industries, and agricultural interests in the Red River and Arkansas Basins experienced water shortages. Inorganic pollution of the Red River and Arkansas River and many of their tributaries prevented the utilization of these waters except under extreme conditions. The obtaining of an adequate supply of good quality water is a primary problem in the many parts of the Red and Arkansas River Basins.

Purpose

This water quality conservation project is for the purpose of determining ways and means of obtaining and/or conserving desirable water quality in the Arkansas and Red River drainage basins through pollution control.

Objectives

The objectives of the project are—

- (a) To determine the various factors which cause degradation of water quality in the Arkansas and Red Rivers.
- (b) To identify water of varying quality available for beneficial use.
- (c) To formulate plans for the improvement of water quality.

Area of coverage

Area of coverage includes Red River Basin above Shreveport, La., and the Arkansas River between Great Bend, Kans., and Little Rock, Ark.

Project plan

The project plan will be carried out in four phases:

Phase I: Assemble and evaluate all existing data available from State, local, and Federal agencies and organizations. (This phase has been virtually completed.)

Phase II: Make field studies as necessary to fill gaps in data and provide accurate information on sources and amounts of pollution materials. (This portion of the project was initiated approximately 1 year ago and is currently in progress.)

Phase III: Formulate a plan for water quality improvement and prepare a report including the practicality and feasibility of controlling the sources of inorganic pollution. (This has not yet been initiated.)

Phase IV: Implementation of conclusions and recommendations. This is not considered a Public Health Service function and will be carried out by other Federal, State and/or local interests.

Project schedule

Fiscal year:	Activity
1958-----	Completion of phase I.
1959-----	Initiate phase II.
1960-----	} Completion of phase II.
1961-----	
1962-----	Completion of phase III.
1963-----	To be carried out by other State, Federal, and/or local interests.

Fiscal year:	Cost
1958-----	\$85,000 expended.
1959-----	\$63,000 expended.
1960-----	\$400,000 estimated need.
1961-----	\$400,000 estimated need.
1962-----	\$100,000 estimated need.

Conduct of field investigations (Red River)

The field investigations in the Red River Basin have been conducted in co-operation with the Texas State Department of Health, and the U.S. Geological Survey, North Texas State Teachers College and Oklahoma State agencies. Future operations will continue to be conducted in cooperation with other local, State, and Federal agencies. Contributions of personnel and information from the cooperating agencies have been sizable. (Six man-years provided by the Texas State Department of Health.)

Preliminary findings—Red River Basin

(a) The inorganic pollution originates from both natural and man-made sources. In the Wichita River Basin most of the inorganic pollution in Lake Kemp originates from springs located 5 miles southeast of Paducah on the north fork and from springs located near Guthrie on the south fork and from the seeps on the middle fork approximately on a line between Paducah and Guthrie, Tex.

(b) Salt deposited on the ground surface by discharge from oil wells located between Lake Kemp and Wichita Falls increase the total amount of chlorides contributed to the Red River below Wichita Falls by approximately 50 percent. The total amount of chlorides contributed to the Red River by the Wichita River is estimated at 700 tons per day.

(c) One large spring at Esteline, Tex., located on Prairie Dog Town fork discharges approximately 300 tons of chloride into the Red River per day.

(d) Three springs located on the Elm Fork of the Red River in northwest Harmon County, Okla., contribute approximately 300 tons of chloride per day.

(e) Approximately 1,500 individual measurements of concentration and 300 individual measurements of flow have been made in the upper Red River. These have been made on a reconnaissance basis and should be verified by long-term flow and quality data.

(f) Sources presently under surveillance account for approximately 40 percent of the sodium content found in Lake Texoma. Continued fieldwork will be necessary to locate the remaining sources of inorganic pollutants.

(g) The concentration of chloride in the brines from both natural and oil well sources is extremely high and the volume of the flow very low. The volume of the flow of brines is so low that it appears at this time both practical and feasible to provide control works which will prevent or greatly reduce the salt brines reaching and polluting the waterways.

STATEMENT OF MR. CALVIN T. WATTS, ASSISTANT DIRECTOR, STATE OF LOUISIANA,
DEPARTMENT OF PUBLIC WORKS, IN SUPPORT OF ADEQUATE APPROPRIATIONS FOR
WATER POLLUTION RESEARCH IN THE RED RIVER BASIN

The Department of Public Works is the planning agency of the State government, and as such is responsible for the orderly planning and development of the water resources of Louisiana. In accordance with its responsibilities the department submits this statement in support of adequate funds for water pollution research on Red River and its tributaries.

The people of Louisiana realize that water is the State's most important natural resource—that an adequate supply of pure fresh water is just as fundamental to the economy of the State as its thousands of miles of navigable waterways and its vast flood-control works.

In the past, our water supplies seemed unlimited and water was a liability to the people of Louisiana because of the large amounts we have to pass through the State to the Gulf of Mexico during periods of flood. To do this we have had to build extensive levee systems at tremendous costs to local interests. In Louisiana, along Red River alone, our 10 levee boards and the department of public works have had to spend in excess of \$35 million for this purpose in addition to that spent by the Federal Government to protect our cities, farms, and other improvements from flooding.

But times have changed with the influx of industries to develop the enormous mineral resources of the State, with the growth of agriculture, and with the great increase in population, so that today water of good quality is the most important element in our modern, highly complex economy. As a result of these developments, water has now become a valuable asset to the State of Louisiana and we have become one of the major water-using States in the Nation. Louisiana ranks 10th in the industrial use of water and 24th in municipal use, besides using more for irrigation than any State east of the Mississippi, and we are now vitally concerned with the quality of water which enters the State, in addition to the periodic excesses which confront us every year. Despite the fact that tremendous sums have been spent on Red River to protect the valley from damages due to flooding, there are prolonged periods when we are not able to use the water beneficially due to the high concentration of chlorides and sulphides originating in the States above us.

The control and prevention of water pollution is of vital interest to Louisiana because as a coastal State it is subject to contamination from all directions—from interstate streams on the north, east, and west, and from the saline waters of the Gulf of Mexico on the south. We are doing something about salt water intrusion and pollution originating within the State, but we are not in a position to do anything about pollution in the streams which originates outside of our borders. Therefore, we consider it of utmost importance to initiate a sound Federal research program to determine the sources of pollution and the best means of pollution control in those streams which directly affect us.

The State of Louisiana is actively engaged in a long-range program to improve the quality and increase the availability of its waters. We have a cooperative program with the U.S. Geological Survey affecting both ground and surface supplies, and the Department of Public Works has recently completed (through the U.S. Waterways Experiment Station at Vicksburg) a model study of salt water intrusion from the Gulf of Mexico at a cost of over \$250,000. Studies such as those are constantly being made within the State, but we need more information on control of pollution on the interstate streams.

Two of our largest cities, Shreveport with a population of 182,000 on Red River and Monroe with a population of 66,100 on the Ouachita River, must go elsewhere for water for domestic and municipal use because of the polluted state of these large streams. Because there are no adequate ground water supplies, both of these areas and the valleys in which they are situated are severely handicapped by the loss of such large volumes of water which could otherwise be put to beneficial use.

By mutual agreement with Arkansas, we are making progress in cleaning up the Ouachita River, but the situation is entirely different on Red River, where the problem is complicated by natural conditions such as salt springs and highly mineralized soils.

We believe that the waters of these streams, now rendered useless by pollution, can be improved in quality and thus be beneficial for industrial, municipal, and agricultural use. However, the problem must be studied first to find out what needs to be done in order to bring this about.

We in Louisiana are certain that an adequately financed research program will return tremendous dividends to the Nation and to the affected river valleys by pointing the way to increase and preserve our water supplies. Therefore, on behalf of the people of Louisiana, the department of public works requests this committee to recommend an appropriation of at least \$400,000 to the Department of Health, Education, and Welfare for continuing its studies on water pollution in the Red River Basin.

GRANTS FOR WASTE TREATMENT WORKS CONSTRUCTION

APPROPRIATION ESTIMATE

"For payments under section 6 of the Water Pollution Control Act, as amended (33 U.S.C. 466e), **[\$45,000,000]** \$20,000,000, to remain available only until June 30, **[1960: Provided, That allotments under such section 6 for the current fiscal year shall be made on the basis of \$50,000,000]** 1961."

Amounts available for obligation

	1959 appro- piation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$45,000,000	\$20,000,000	\$45,000,000
Unobligated balance brought forward.....	9,670,242	5,000,000	5,000,000
Unobligated balance carried forward.....	-5,000,000		
Total obligations.....	49,670,242	25,000,000	50,000,000

Obligations by activities

	1959 appro- piation	1960 budget estimate	1960 House allowance
ACTIVITIES			
Grants for construction.....	\$45,000,000	\$20,000,000	\$45,000,000
Unobligated balance brought forward.....	9,670,242	5,000,000	5,000,000
Unobligated balance carried forward.....	-5,000,000		
Total obligations.....	49,670,242	25,000,000	50,000,000

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
11 Grants, subsidies, and contributions.....	\$49,670,242	\$25,000,000	\$50,000,000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$25 million for "Grants for waste treatment works construction." As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

The increase restored this appropriation to its fiscal year 1959 level of \$45 million. At present there is a backlog of requests for these grants amounting to \$75.5 million in State and Health, Education, and Welfare regional offices. The House increase will be used to meet a portion of this demand.

Allocations of grant-in-aid funds for grants for waste treatment works construction

State or Territory	1958 alloca- tions	1959 alloca- tions	Esti- mated 1960 alloca- tions	State or Territory	1958 alloca- tions	1959 alloca- tions	Esti- mated 1960 alloca- tions
Alabama.....	\$1, 157, 175	\$1, 144, 725	\$448, 840	Nevada.....	\$330, 200	\$335, 325	\$142, 210
Alaska.....	425, 100	425, 275	169, 490	New Hampshire...	529, 825	521, 925	210, 310
Arizona.....	578, 400	576, 450	236, 700	New Jersey.....	1, 110, 125	1, 109, 775	445, 520
Arkansas.....	1, 030, 100	1, 024, 975	404, 500	New Mexico.....	627, 850	631, 350	245, 710
California.....	2, 052, 475	2, 048, 825	818, 290	New York.....	2, 746, 550	2, 744, 325	1, 094, 240
Colorado.....	636, 675	635, 700	253, 210	North Carolina...	1, 272, 425	1, 260, 950	504, 450
Connecticut.....	626, 575	624, 100	248, 080	North Dakota.....	676, 250	671, 725	264, 550
Delaware.....	346, 450	336, 325	135, 260	Ohio.....	1, 655, 100	1, 658, 600	662, 330
District of Columbia.....	453, 675	454, 575	181, 800	Oklahoma.....	858, 725	862, 175	345, 380
Florida.....	907, 550	899, 575	359, 880	Oregon.....	651, 575	657, 300	264, 500
Georgia.....	1, 136, 150	1, 128, 600	449, 310	Pennsylvania.....	2, 098, 725	2, 102, 975	839, 700
Idaho.....	593, 325	592, 125	236, 770	Rhode Island.....	509, 600	514, 475	210, 170
Illinois.....	1, 749, 050	1, 749, 450	700, 450	South Carolina...	1, 007, 525	1, 022, 525	409, 540
Indiana.....	1, 029, 725	1, 039, 850	416, 330	South Dakota.....	664, 050	676, 700	272, 280
Iowa.....	882, 450	883, 875	358, 570	Tennessee.....	1, 130, 075	1, 129, 400	449, 630
Kansas.....	749, 150	758, 325	305, 980	Texas.....	1, 716, 350	1, 714, 800	685, 430
Kentucky.....	1, 075, 525	1, 073, 825	428, 990	Utah.....	588, 525	591, 875	238, 640
Louisiana.....	993, 350	986, 350	390, 040	Vermont.....	556, 650	545, 600	219, 460
Maine.....	634, 650	625, 725	252, 690	Virginia.....	1, 025, 525	1, 019, 100	409, 890
Maryland.....	750, 000	754, 525	304, 050	Washington.....	756, 050	762, 825	307, 880
Massachusetts.....	1, 126, 450	1, 123, 575	447, 090	West Virginia....	904, 200	900, 000	348, 580
Michigan.....	1, 386, 275	1, 394, 550	561, 270	Wisconsin.....	974, 625	931, 025	392, 740
Minnesota.....	923, 250	929, 175	371, 200	Wyoming.....	450, 750	458, 050	181, 530
Mississippi.....	1, 172, 550	1, 162, 925	466, 600	Hawaii.....	504, 325	513, 475	209, 140
Missouri.....	1, 060, 950	1, 063, 350	424, 450	Puerto Rico.....	1, 177, 725	1, 168, 100	468, 670
Montana.....	503, 325	512, 475	206, 570	Virgin Islands....	822, 175	812, 550	326, 450
Nebraska.....	674, 150	683, 850	274, 660	Total.....	50, 000, 000	50, 000, 000	20, 000, 000

WASTE TREATMENT WORKS CONSTRUCTION

Senator HILL. Now, Mr. Hollis, address yourself, please, to the "Waste treatment works construction."

How much did the Department request for this item?

Mr. KELLY. \$45 million.

Senator HILL. They requested the full \$45 million?

Mr. KELLY. The Department requested \$45 million of the Budget Bureau and the President's budget provides for \$20 million.

Senator HILL. And the House added an additional \$25 million, so there is now in the bill the full amount of \$45 million?

Mr. KELLY. That is right.

Senator HILL. All right, Mr. Hollis, proceed.

USE OF GRANT FUNDS

Mr. HOLLIS. This program is authorized under Public Law 660. These grants are intended to be used as incentive grants to cities, with the objective of raising the level of construction of municipal sewage treatment plants so as to halt the increasing load of municipal pollution discharged into the streams.

As a result of a backlog that occurred during World War II, when we had practically no construction, there is a necessity, a need to increase our annual level of construction of municipal sewage treatment plants to a little more than \$500 million a year.

1950-55 CONSTRUCTION LEVELS

Now for the years 1950-55, we were operating at an annual construction level on the average of \$200 million. We believe these

grants have played a part, not the total, but a part in being able to increase this level of construction. Last year the construction level was \$400 million, double the annual average for the 5 years 1950-55.

The law provides that the moneys be apportioned between the States on a formula basis specified in the act and that the States certify priorities for the use of the money in a manner prescribed in the act.

We can make grants up to 30 percent of the total project cost, or \$250,000, whichever is the smaller. In other words, there is a ceiling on the grant of \$250,000 maximum to any one project.

PERCENTAGE OF COST BORNE BY FEDERAL GOVERNMENT

Senator HILL. Up to this time you state that the Federal grant represents approximately 20 percent of the cost of the project. In other words, the Federal Government puts up about a fifth and the local community puts up the other four-fifths?

Mr. HOLLIS. Yes, sir.

Senator HILL. You now have applications for some 620 projects, is that correct?

Mr. HOLLIS. Well, we actually have more than a thousand applications pending.

Senator HILL. I have been reading from your statement here. You said that municipalities have submitted applications for 620 projects requesting \$62.7 million in grants for construction.

Mr. HOLLIS. Yes, sir; I was referring to the total grants we have, plus those the States have. You are correct, sir; we have in our files 620 projects.

Senator HILL. Are there any questions on this?

You can file your full statement for the record, Mr. Hollis.

Mr. HOLLIS. Yes, sir. I thank you.

(The statement referred to follows:)

STATEMENT OF CHIEF, DIVISION OF SANITARY ENGINEERING SERVICES, PUBLIC HEALTH SERVICE, ON GRANTS FOR WASTE TREATMENT WORKS CONSTRUCTION

Mr. Chairman and members of the committee, the Federal Water Pollution Control Act of 1956 authorizes grants to States, municipalities, and interstate and intermunicipal agencies to stimulate construction of necessary waste treatment works. Fifty million dollars per year is authorized, with the aggregate of all appropriations not to exceed \$500 million. This request is for \$20 million. The reduction of \$25 million below the appropriation for 1959 results from overall budget considerations.

As of January 1, 1959, grant offers have been made to cities for a total of 1,337 projects requiring grants of \$113.7 million. The \$113.7 million in grant funds, together with \$481.3 million of local funds, is resulting in the construction of waste treatment works costing \$595 million. Experience at this time, therefore, shows that Federal grants represent approximately 20 percent of the cost of a project. In addition to grant offers already made, municipalities have submitted applications for 620 projects, requesting \$62.7 million in grants for construction which would cost approximately \$480 million.

The appropriations for fiscal years 1957, 1958, and 1959 provide grants for the construction of approximately 1,668 projects. On the basis of experience to date, it is estimated that \$20 million will provide grants for about 225 projects costing about \$100 million.

LETTER FROM MAYOR WAGNER

Senator HILL. Senator Hayden, chairman of this committee, has received a letter from the Hon. Robert F. Wagner, mayor of New

York City, urging appropriation of the full authorization of \$50 million for the construction of waste treatment works. Mayor Wagner's letter will be included in the record at this point.

(The letter referred to follows:)

CITY OF NEW YORK,
OFFICE OF THE MAYOR,
New York, N.Y., April 16, 1959.

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: I strongly urge that the Senate Appropriations Committee restore the \$50 million authorized by section 6 of Public Law 660, 84th Congress, the Federal Water Pollution Control Act, in lieu of the \$20 million proposed in this year's budget, for aid to municipalities to construct sewage treatment plants.

This vital program has stimulated the construction of two greatly needed municipal sewage treatment plants in the city of New York and others throughout the country. To reduce the appropriation at this time may delay indefinitely construction of a third much needed plant within our city.

A continuation of this program at at least the authorized rate of expenditure is an important matter for our city as well as for other municipalities. The serious fiscal condition in which many municipalities find themselves makes this Federal aid imperative in the attack on water pollution.

Sincerely yours,

ROBERT F. WAGNER,
Mayor.

LETTER FROM SENATOR LONG

Senator HILL. Senator Long has addressed a letter to me urging that this committee recommend an appropriation for waste treatment works construction in the same amount as provided this year, \$45 million. Senator Long's letter will be included at this point in the record.

(The letter referred to follows:)

U.S. SENATE,
Washington, D.C., March 13, 1959.

Hon. LISTER HILL,
Chairman, Subcommittee on Labor-HEW,
Committee on Appropriations, U.S. Senate.

DEAR LISTER: In reading through the President's budget, I note that funds needed to continue work under provisions for grants for pollution correction purposes under Public Law 660 of the 80th Congress have been drastically cut.

Funds included in the budget for fiscal year 1960 are \$20 million, which is some \$30 million less than was available last year. As far as Louisiana is concerned, it is my understanding that a proration of the funds recommended by the President would reduce our share from \$986,350 to \$390,040.

In my opinion, this program has been a very vital one and, through these grants, it has been possible for a number of our smaller communities to secure needed sanitary facilities. This is particularly true since the program under Public Law 660 works hand in glove with community facilities law of which I am the author, and which makes it possible for these small towns to secure backing of the bonds they issue to cover the cost of local public works.

I would strongly recommend that you give every consideration to restoring funds to this appropriation to the full amount that was available last year.

With warmest regards, I am,

Sincerely yours,

RUSSELL.

LETTER FROM JOHN J. BELL, BOONVILLE, MO.

Senator HILL. Senator Symington has received a letter from the Honorable John J. Bell, mayor of the city of Boonville, Mo., in support of a greater appropriation for waste treatment works construc-

tion. Mayor Bell's letter will be included in the record at this point.
(The letter referred to follows:)

CITY OF BOONVILLE,
Boonville, Mo., February 20, 1959.

Hon. STUART SYMINGTON,
Senate Office Building, Washington, D.C.

DEAR SENATOR SYMINGTON: As mayor of the city of Boonville, I am writing you earnestly requesting your help in restoring one of President Eisenhower's proposed budget cuts. I refer to the one, which I understand would reduce Missouri's share of funds to cooperate with towns and cities from a little over \$1 million to \$424,450 a year. We hope you will also realize the tremendous hardships that would be caused in our State should the President's further recommendation, that this should be the last year in which the Federal Government cooperates on sewage disposal plants, be accepted.

The citizens of Boonville are genuinely concerned about this matter, because we are now selecting a firm of engineering consultants to do a preliminary sewer survey, preparatory to installing a necessary sewage treatment plant. It is our belief that such a project would cost in the neighborhood of a half million dollars, and the 30-percent share the Government has been paying, is essential if we are to complete this project. Since we are dumping our sewage into the Missouri River on a permit from the State water pollution board, granted us only because we are furthering this project, you can see our predicament. We count heavily on the Federal funds which we expected to be available to us until June 1965. Should the funds be discontinued prior to the completion of our project we would be in no position to finish this important work.

Won't you please use your influence to get a restoration of this year's cut, and a continuation of Federal funds for this type project, until this vital work in Boonville and other towns is concluded.

Very truly yours,

JOHN J. BELL,
Mayor, City of Boonville.

PREPARED STATEMENT

Senator HILL. Senators Humphrey and McCarthy have requested that their joint statement in support of increased appropriations for water pollution be made a part of the record of these proceedings. Their statement will be included at this point in the record.

(The statement referred to follows:)

STATEMENT OF SENATOR HUBERT H. HUMPHREY AND SENATOR EUGENE MCCARTHY IN SUPPORT OF INCREASED APPROPRIATIONS FOR WATER POLLUTION CONTROL

Mr. Chairman, there is a great national interest in promoting a uniform program for water pollution control in order to restore and conserve water resources which are vital to national economy and welfare. Evidence of this widespread interest is the Water Pollution Control Act which provides for Federal grants, subsidies, and contributions to States, municipalities, and interstate agencies to stimulate and assist in the construction of sewage treatment works.

When this legislation was enacted, it was estimated that the total municipal sewage treatment construction needs for the country would amount to about \$5½ billion. It was further estimated that one-fifth of this amount—\$1 billion—would be a fair share for the Federal Government to assume.

We are now painfully aware of the fact that these estimates of cost for needed sewage treatment construction were much too low. This is because of the increase in population and expansion of industry beyond all expectations. Although the program has substantially stimulated construction among municipalities which were ready and able to get grants, there still remain many deserving towns which have needed more time to develop their projects. These projects will be indefinitely delayed if the Federal aid program is killed or reduced.

Consequently, Mr. Chairman, we speak today in support of an increased appropriation for water pollution control in fiscal 1960 and, therefore, in opposition to any proposed cutback in the program.

We strongly urge the committee to favorably report an appropriation of not less than \$100 million for the coming fiscal year and for each succeeding year until the full total of \$1 billion has been provided. This is minimum Federal participation.

We urge the members of this committee to give consideration to the following points while deliberating on an appropriation for fiscal 1960:

(1) There is a national responsibility to aid in pollution control because our entire social and governmental system permitted and fostered the settlement and development of the country with no control of pollution until relatively recent years;

(2) The financial burden of carrying out the provisions of this program are too great for most municipalities;

(3) A Federal-aid program is the most effective and economical solution to this problem.

All Minnesotans are extremely concerned about proposals to reduce funds available for construction grants. Because Minnesota is particularly affected by the problems of water pollution and sewage treatment, we would like to discuss briefly the Minnesota scene.

Under provisions of the Water Pollution Control Act, 29 municipalities in Minnesota have received grants for aid in constructing needed sewage treatment works during the past 3 years. The estimated cost of construction on these projects is \$11,300,000.

Dr. R. N. Barr, secretary of the Minnesota Water Pollution Control Commission, secretary and executive officer of the Minnesota Department of Health, and one of the foremost authorities on these problems in Minnesota, estimates that two-thirds of these municipalities would not have proceeded with projects as fast as they did if Federal aid had not been available to them. During the last 2 years, requests for funds exceeded the funds available by about four times.

Dr. Barr conservatively estimates that for the next 3 years construction volume in Minnesota, if sufficient Federal aid is available, will total about \$21 million. In addition, it is estimated that present requirements for constructing other new sewage treatment works and improving old ones would total another \$110 million.

There is much more to the Minnesota water pollution story, Mr. Chairman, but it will be sufficient to say that water pollution control and sewage treatment are sorely needed.

Again we urge the committee to provide for an appropriation of not less than \$100 million for water pollution control in the next fiscal year.

GRANTS FOR HOSPITAL CONSTRUCTION

STATEMENT OF DR. JACK C. HALDEMAN, CHIEF, DIVISION OF HOSPITAL AND MEDICAL FACILITIES; ACCOMPANIED BY DR. JAMES V. LOWRY, CHIEF, BUREAU OF MEDICAL SERVICES; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For [payments] *grants and loans* under parts C, D, and G, title VI, of the Act, as amended, **[\$186,200,000]** \$101,200,000, of which **[\$150,000,000]** \$79,000,000 shall be for [payments for] hospitals and related facilities pursuant to part C, \$1,200,000 shall be for the purposes authorized in sections 636 of *part D* of the Act, and **[\$35,000,000]** \$21,000,000 shall be for [payments for] facilities pursuant to part G, as follows **[\$7,500,000]** \$6,500,000 for diagnostic or treatment centers, **[\$7,500,000]** \$6,500,000 for hospitals for the chronically ill and impaired, **[\$10,000,000]** \$4,000,000 for rehabilitation facilities, and **[\$10,000,000]** \$4,000,000 for nursing homes: *Provided*, That allotments under such parts C and G to the several States for the current fiscal year shall be made on the basis of amounts equal to the limitations specified herein."

Amounts available for allocation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation.....	\$186, 200, 000	\$101, 200, 000	\$143, 700, 000

Allocations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Construction of hospitals, etc., under part C of the Public Health Service Act.....	0	\$150,000,000	0	\$79, 000, 000	0	\$121, 500, 000
Construction of medical facilities under part G of the act:						
Chronic disease hospitals.....	0	7, 500, 000	0	6, 500, 000	0	6, 500, 000
Diagnostic or treatment centers.....	0	7, 500, 000	0	6, 500, 000	0	6, 500, 000
Rehabilitation facilities.....	0	10, 000, 000	0	4, 000, 000	0	4, 000, 000
Nursing homes.....	0	10, 000, 000	0	4, 000, 000	0	4, 000, 000
Hospital and medical facilities research activities..	20	1, 200, 000	20	1, 200, 000	20	1, 200, 000
Total allocations.....	20	186, 200, 000	20	101, 200, 000	20	143, 700, 000

Obligations by objects

Description	1959 estimate		1960 estimate		House allow- ance	
Total number of permanent positions.....	20		20		20	
Full-time equivalent of all other positions.....	2		2		2	
Average number of all employees.....	20		20		20	
Number of employees at end of year.....	20		20		20	
Average GS grade and salary.....	7. 9	\$6, 293	7. 9	\$6, 293	7. 9	\$6, 293
01 Personal services:						
Permanent positions.....	\$132, 200		\$143, 960		\$143, 960	
Positions other than permanent.....	16, 000		10, 000		10, 000	
Other personal services.....	360		720		720	
Total personal services.....	148, 560		154, 680		154, 680	
02 Travel.....	35, 000		30, 300		30, 300	
03 Transportation of things.....	250		250		250	
04 Communication services.....	1, 000		1, 000		1, 000	
05 Rents and utility services.....	500		500		500	
06 Printing and reproduction.....	1, 685		1, 000		1, 000	
07 Other contractual services.....	3, 000		2, 500		2, 500	
08 Supplies and materials.....	1, 375		1, 500		1, 500	
09 Equipment.....	2, 625		1, 500		1, 500	
11 Grants, subsidies, and contributions.....	164, 436, 388		132, 900, 000		147, 775, 000	
Contribution to retirement fund.....	5, 175		5, 940		5, 940	
15 Taxes and assessments.....	830		830		830	
16 Investments and loans.....	500, 000		500, 000		500, 000	
Total obligations.....	165, 136, 388		133, 600, 000		148, 475, 000	

Summary of changes

	Positions	Amount
1959 actual appropriation.....	20	\$186, 200, 000
1960 appropriation request.....	20	101, 200, 000
Net change requested.....		—85, 000, 000

Summary of changes—Continued

	1960 budget estimate	1960 House allowance
Increases: For mandatory items: Extra day's pay (261 days in 1959 and 262 days in 1960)-----	\$360	\$360
Decreases: Reduction in amount proposed for construction of hospitals, public health centers, and related medical facilities authorized under parts C and G of the Public Health Service Act-----	85,000,000	42,500,000
Hospital and medical facilities research activities: Other objects of expense-----	360	360
Subtotal-----	85,000,360	42,500,360
Total change requested-----	-85,000,000	-42,500,000

EFFECT OF HOUSE ACTION

The House in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget for the construction of hospitals and public health centers under part C of the program from \$79 million to \$121.5 million. As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

The increased amount of \$121.5 million approved by the House for the part C program would permit the approval of 320 hospital projects providing 18,600 beds and 90 public health centers as contrasted with the President's budget which would permit the approval of 210 hospital projects providing 12,100 beds and 60 public health centers.

As stated by the Secretary when he appeared before the committee such an increase would further contribute to inflation and weakening of the national economy. The Department has recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

Tentative allocations to States and Territories for construction of hospital and medical facilities for fiscal year ending June 30, 1960, as of Dec. 19, 1958

State or Territory	Total allocation	Allocation under part C, hospitals	Allocation under part G, medical facilities				
			Total allocation under part G	Chronic disease hospitals	Diagnos- tic or treatment centers	Rehabili- tation facilities	Nursing homes
Total-----	\$100,000,000	\$79,000,000	\$21,000,000	\$6,500,000	\$6,500,000	\$4,000,000	\$4,000,000
Alabama-----	2,978,609	2,474,935	503,674	148,455	148,455	103,382	103,382
Arizona-----	925,314	625,314	300,000	100,000	100,000	50,000	50,000
Arkansas-----	1,833,098	1,507,182	325,916	100,000	100,000	62,958	62,958
California-----	4,083,635	3,393,105	690,530	203,529	203,529	141,736	141,736
Colorado-----	1,070,053	770,053	300,000	100,000	100,000	50,000	50,000
Connecticut-----	732,644	432,644	300,000	100,000	100,000	50,000	50,000
Delaware-----	500,000	200,000	300,000	100,000	100,000	50,000	50,000
District of Colum- bia-----	500,000	200,000	300,000	100,000	100,000	50,000	50,000
Florida-----	2,728,664	2,267,256	461,408	135,997	135,997	94,707	94,707
Georgia-----	3,183,915	2,645,525	538,390	158,687	158,687	110,508	110,508
Idaho-----	692,806	392,806	300,000	100,000	100,000	50,000	50,000
Illinois-----	3,120,273	2,592,643	527,630	155,516	155,516	108,299	108,299
Indiana-----	2,288,545	1,901,559	386,986	114,062	114,062	79,431	79,431
Iowa-----	1,877,201	1,547,885	329,316	100,000	100,000	64,658	64,658
Kansas-----	1,404,476	1,104,476	300,000	100,000	100,000	50,000	50,000
Kentucky-----	2,717,884	2,258,298	459,586	135,460	135,460	94,333	94,333
Louisiana-----	2,464,253	2,047,555	416,698	122,819	122,819	85,530	85,530
Maine-----	843,987	543,987	300,000	100,000	100,000	50,000	50,000
Maryland-----	1,389,389	1,089,389	300,000	100,000	100,000	50,000	50,000
Massachusetts-----	1,847,486	1,520,462	327,024	100,000	100,000	63,512	63,512
Michigan-----	3,215,691	2,671,927	543,764	160,271	160,271	111,611	111,611
Minnesota-----	2,026,781	1,684,059	342,722	101,015	101,015	70,346	70,346
Mississippi-----	2,487,895	2,067,199	420,696	123,997	123,997	86,351	86,351
Missouri-----	2,313,322	1,922,146	391,176	115,297	115,297	80,291	80,291
Montana-----	613,757	313,757	300,000	100,000	100,000	50,000	50,000

Tentative allocations to States and Territories for construction of hospitals and medical facilities for fiscal year ending June 30, 1960, as of Dec. 19, 1958—Con.

State or Territory	Total allocation	Allocation under pt. C, hospitals	Allocation under part G, medical facilities				
			Total allocation under pt. G	Chronic disease hospitals	Diagnostic or treatment centers	Rehabilitation facilities	Nursing homes
Nebraska.....	\$1,102,269	\$802,269	\$300,000	\$100,000	\$100,000	\$50,000	\$50,000
Nevada.....	500,000	200,000	300,000	100,000	100,000	50,000	50,000
New Hampshire.....	587,670	287,670	300,000	100,000	100,000	50,000	50,000
New Jersey.....	1,739,442	1,420,748	318,694	100,000	100,000	59,347	59,347
New Mexico.....	809,414	509,414	300,000	100,000	100,000	50,000	50,000
New York.....	4,570,945	3,798,011	772,934	227,817	227,817	158,650	158,650
North Carolina.....	4,061,695	3,374,875	686,820	202,436	202,436	140,974	140,974
North Dakota.....	748,595	448,595	300,000	100,000	100,000	50,000	50,000
Ohio.....	3,725,695	3,095,691	630,004	185,690	185,690	129,312	129,312
Oklahoma.....	1,684,014	1,369,594	314,420	100,000	100,000	57,210	57,210
Oregon.....	1,084,747	784,747	300,000	100,000	100,000	50,000	50,000
Pennsylvania.....	5,259,401	4,370,051	889,350	262,130	262,130	182,545	182,545
Rhode Island.....	656,189	356,189	300,000	100,000	100,000	50,000	50,000
South Carolina.....	2,407,229	2,000,173	407,056	119,977	119,977	83,551	83,551
South Dakota.....	795,584	495,584	300,000	100,000	100,000	50,000	50,000
Tennessee.....	3,035,254	2,522,002	513,252	151,278	151,278	105,348	105,348
Texas.....	5,960,431	4,952,541	1,007,890	297,069	297,069	206,876	206,876
Utah.....	796,448	496,448	300,000	100,000	100,000	50,000	50,000
Vermont.....	515,222	215,222	300,000	100,000	100,000	50,000	50,000
Virginia.....	2,718,170	2,258,534	459,636	135,475	135,475	94,343	94,343
Washington.....	1,342,793	1,042,793	300,000	100,000	100,000	50,000	50,000
West Virginia.....	1,625,437	1,315,533	309,904	100,000	100,000	54,952	54,952
Wisconsin.....	2,184,428	1,815,046	369,382	108,873	108,873	75,818	75,818
Wyoming.....	500,000	200,000	300,000	100,000	100,000	50,000	50,000
Alaska.....	500,000	200,000	300,000	100,000	100,000	50,000	50,000
Guam.....	67,142	55,790	11,352	3,346	3,346	2,330	2,330
Hawaii.....	557,653	257,653	300,000	100,000	100,000	50,000	50,000
Puerto Rico.....	2,597,124	2,157,956	439,168	129,442	129,442	90,142	90,142
Virgin Islands.....	27,331	22,709	4,622	1,362	1,362	949	949

NOTE.—Basis of allocations, per statutory formula:
(a) Total population, as estimated by Bureau of the Census: United States, July 1, 1958 (series P-25, No. 189, dated Nov. 13, 1958), Territories, same as United States, except Virgin Islands, July 1, 1955 (series P-25, No. 145, dated Oct. 19, 1956), and Guam, 1950 census.
(b) Allocation percentages for the fiscal years 1960 and 1961, as promulgated in the Federal Register, Sept. 19, 1958.

SALARIES AND EXPENSES, HOSPITAL CONSTRUCTION SERVICES

“For salaries and expenses incident to carrying out title VI of the Act, as amended, **[\$1,600,000]** *\$1,604,000.*”

Amounts available for obligation

	1959 appropriation	1960 budget estimate	1960 House allowance
Appropriation.....	\$1,600,000	\$1,604,000	\$1,604,000
Proposed supplemental due to pay increases.....	35,000	0	0
Comparative transfer to “Assistance to States, general, Public Health Service”.....	—21,000	0	0
Total.....	1,614,000	1,604,000	1,604,000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi-tions	Amount	Posi-tions	Amount	Posi-tions	Amount
1. Operations and technical services.....	164	\$1,499,800	152	\$1,489,800	152	\$1,489,800
2. Administration.....	17	114,200	17	114,200	17	114,200
Total obligations.....	181	1,614,000	169	1,604,000	169	1,604,000

Obligations by objects

Description	1959 estimate		1960 estimate		House allow- ance	
Total number of permanent positions.....	181		169		169	
Full-time equivalent of all other positions.....	1		1		1	
Average number of all employees.....	165		163		163	
Number of employees at end of year.....	169		169		169	
Average GS grade and salary.....	8.9	\$7,440	8.9	\$7,430	8.9	\$7,430
01 Personal services:						
Permanent positions.....	\$1,331,185		\$1,317,670		\$1,317,670	
Positions other than permanent.....	5,000		5,000		5,000	
Other personal services.....	4,315		8,630		8,630	
Total personal services.....	1,340,500		1,331,300		1,331,300	
02 Travel.....	107,600		107,600		107,600	
03 Transportation of things.....	5,000		5,000		5,000	
04 Communication services.....	8,600		8,600		8,600	
06 Printing and reproduction.....	17,000		17,000		17,000	
07 Other contractual services.....	29,000		29,000		29,000	
08 Supplies and materials.....	15,000		15,000		15,000	
09 Equipment.....	17,000		17,000		17,000	
11 Grants, subsidies, and contributions:						
Contribution to retirement fund.....	72,000		71,200		71,200	
15 Taxes and assessments.....	2,300		2,300		2,300	
Total obligations.....	1,614,000		1,604,000		1,604,000	

Summary of changes

	Positions	Amount
1959 actual appropriation.....	184	\$1,600,000
1959 supplemental appropriation.....		35,000
Total appropriation.....	184	1,635,000
Deduct comparative transfer.....	-3	-21,000
Revised 1959 base.....	181	1,614,000
1960 appropriation request.....	169	1,604,000
Net change requested.....	-12	-10,000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases: For mandatory items:				
Extra day's pay (261 days in 1959 and 262 days in 1960).....		\$4,315		\$4,315
Decreases: For operations and technical services:				
Personal services.....	12	13,515	12	13,515
Contribution to retirement fund.....		800		800
Subtotal.....	12	14,315	12	14,315
Total change requested.....	-12	-10,000		-10,000

AMOUNT REQUESTED

Senator HILL. Dr. Haldeman, we are very glad to have you here with us, sir. We will be happy to have you address yourself to this item, but first tell us how much the Department requested for hospital construction, Mr. Kelly?

Mr. KELLY. Mr. Chairman, the preliminary request for the Public Health Service, through the Department, was for \$151,200,000. The Department's preliminary and final request was for \$121,200,000, the budget before you is for \$101,200,000, and the House increased that by \$42,500,000.

Senator HILL. All right, Dr. Haldeman. Just summarize it.

First we have your statement and a table here, which we will put in the record, which shows the number of projects and applications and sets out, State by State, the number of applications for funds, the number of hospitals, and other health facilities awaiting construction today; is that right, Doctor?

Dr. HALDEMAN. That is correct, sir.

(The statement and list referred to follows:)

STATEMENT OF CHIEF DIVISION OF HOSPITAL AND MEDICAL FACILITIES, PUBLIC HEALTH SERVICE, ON GRANTS FOR HOSPITAL CONSTRUCTION

Mr. Chairman and members of the committee, the purpose of the hospital and medical facilities survey and construction program is to assist the States in providing adequate hospital, clinical, and similar services to the people. This is accomplished in three steps; namely, the development of a basic plan for meeting the hospital and medical facilities needs of the State, the construction of such facilities in the order of priority, and the conduct of research, experiments, and demonstrations relating to the development, utilization, and coordination of hospital services.

ESTIMATE FOR 1960

The total request for hospital and medical facilities construction and for research activities for 1960 is \$101.2 million. This amount will provide \$79 million for the construction of hospitals and public health centers; \$21 million for the construction of nursing homes, diagnostic or treatment centers, rehabilitation centers, and chronic disease hospitals; and \$1.2 million for research.

CONSTRUCTION ACTIVITIES

The \$79 million requested for construction of hospitals and public health centers will enable the States to initiate 210 hospital projects involving 12,100 beds and 60 public health centers. The requested \$21 million for construction of other medical facilities will permit the States to initiate 60 nursing homes and chronic disease hospitals involving 2,950 beds, 50 diagnostic and treatment centers, and 28 rehabilitation facilities. This projection of projects and beds which may be constructed with the grant funds requested is based on the assumption that the States will follow the same pattern of project programming in 1960 as was established during 1956 and 1957.

As of December 31, 1958, \$1.1 billion in Federal funds has been committed to 4,315 projects costing a total of \$3.6 billion. Of these projects 2,836 have been completed, are in operation, and are serving their communities, 1,157 are under construction and the remaining 322 are in the preconstruction stages. Completion of these projects will add approximately 184,900 hospital and nursing home beds, and will result in the construction, expansion, or remodeling of 827 public health facilities, 226 diagnostic or treatment centers and 90 rehabilitation facilities. These significant contributions to the expansion of our hospital and medical facilities in this country are offset to a considerable degree, however, by the sharp population increases and the increasing obsolescence rate of existing facilities.

In addition to the more tangible measures of accomplishment, the Hill-Burton program has made many other significant contributions.

(1) The scattered and varied efforts in planning of medical facilities were, upon activation of the Hill-Burton program, replaced by systematic surveys and inventories of existing facilities and orderly long-range planning of needed facilities in each of the States and Territories.

(2) The increased availability of modern facilities in rural areas has had a marked effect in inducing physicians and other professional hospital personnel to practice in rural areas and has resulted in a marked improvement in the level of medical care available in these areas.

(3) The architectural and construction standards developed under the program have made a significant contribution in improving the physical and functional design of hospitals and medical facilities throughout the Nation. These standards have also been copied for use in many foreign countries.

(4) The Hill-Burton program led to the adoption by States of standards of maintenance and operation for hospitals aided under the program.

In addition, all States have adopted programs of licensure for nursing homes and all States, except three, have licensure programs for hospitals. As a result, there has been a general upgrading of standards of maintenance and operation required of medical facilities throughout the country.

This estimate represents a reduction of \$85 million from the 1959 appropriation, and is consistent with the Government-wide policy on construction as reflected in the total Federal budget.

In rural areas substantial progress has been made in the construction of general hospital beds and facilities since the program was activated over 10 years ago. However, the same substantial progress has not been made in the construction of other health facilities, particularly those facilities providing long-term care.

RESEARCH ACTIVITIES

The appropriation act for 1959 included \$1.2 million for research, experiments, and demonstrations relating to the development, utilization, and coordination of hospital services, facilities, and resources. A similar request is included in our estimate for 1960. All of the available research funds are being utilized.

The continuance of such research and studies will assist in the provision of the knowledge and methodology which are necessary to keep the physical plant and equipment, and the operational aspects of our hospital and medical facilities at maximum efficiency. For example, a study of the nature of patient-disturbing noises in hospitals has defined the origin and character of such noises and will lead to better equipment design, arrangement, and sound-proofing. A study of progressive patient care gives promise of answering many questions from hospital and nursing administrators regarding more efficient ways of utilizing scarce professional skills while at the same time improving services to patients. A study by a grantee has analyzed factors contributing to hospital utilization which will be of great benefit to insurance organizations in helping to develop hospital insurance programs for maximum coverage at minimum rates.

STATEMENT OF CHIEF, DIVISION OF HOSPITAL AND MEDICAL FACILITIES, PUBLIC HEALTH SERVICE ON SALARIES AND EXPENSES, HOSPITAL CONSTRUCTION SERVICES

APPROPRIATION ESTIMATE

Mr. Chairman and members of the committee, a request for funds in the amount of \$1,604,000 is submitted under this appropriation to be used for the purpose of carrying out our assigned responsibility for planning and operating the Hill-Burton program during 1960.

SCOPE OF PROGRAM

Effective operation of the Hill-Burton program involves several distinct operational phases.

(1) Successful program administration relies heavily on enlightened and aggressive State agency action. Accordingly, our program of technical assistance, consultation, and liaison with State agencies in all aspects of program administration is substantial.

(2) Minimum standards of design, construction, and equipment must be developed and revised on a continuous basis. Our staff of professional architects, engineers, and equipment specialists is constantly studying the changing requirements of medical practice and reflecting these requirements in the design and equipping of new facilities. This activity produces vital design information for use by States and communities in planning and constructing facilities, and gives maximum assurance that value will be received for each Federal dollar expended.

(3) Basic documents such as State plans, applications, and architectural drawings and specifications must be reviewed and approved, projects must be inspected, payments certified, and bid and award procedures kept under surveillance.

(4) Program planning, development, and direction depend on the acquisition and analysis of bulk data relating to such problems as hospital and medical facilities planning, the progress being made within and outside the Hill-Burton

program to meet the hospital and health facility needs of the country, and the changing patterns of inpatient and outpatient hospital care.

(5) Regulations, procedures, and policies which are adaptable to the varying needs of 54 distinct State and Territorial agencies must be developed and issued.

EXPLANATION OF NEED

The operation of this program requires a large variety of specialized and highly technical skills related to the planning, design, and construction of all types of hospital and medical facilities. For the most part these employees are in the professional or technical fields of medicine, nursing, hospital administration, architecture, engineering, and equipment consultation. Employees in each of these professional categories are minimal in number, have been recruited gradually over a long period of years, have become highly skilled in their respective specialties, and represent the nucleus of the basic staff believed essential to administration of the program.

Many of these professional employees are carrying out responsibilities required by the act which have no relationship to the varying amounts of construction grant funds appropriated from year to year. These activities include the review and approval of annual revisions and supplements to State plans, the development of hospital planning guide material and standards of design, construction, and equipment, the provision of technical assistance and consultation to the State agencies, and the development of regulations, procedures, and policies which constitute the basic framework within which the Public Health Service and State agencies administer the program.

The amount of \$1,604,000 included in this request is necessary to continuation of the Federal Government's role of providing national leadership in the planning and construction of health facilities. The amount requested for 1960 is approximately the same as the amount appropriated for 1959.

Summary of anticipated construction of hospitals and other medical facilities (under title VI of the Public Health Service Act) if there were no limitation on Federal assistance for fiscal years 1960 and 1961

State and program year	Number of projects			Beds or units added, by type of project								Estimated cost (thousands)						
				Part C				Part G				Total program		Part O		Part G		
	Total	Part C	Part G	General hos- pitals	Mental hos- pitals	Chronic hos- pitals	Tuber- culosis hos- pitals	Health center (units)	Diag- nosis or treat- ment (units)	Chronic hos- pitals	Reha- bilita- tion facili- ties (units)	Nurs- ing homes	Total cost	Federal share	Total cost	Federal share	Total cost	Federal share
Total	2,021	1,408	613	72,256	12,130	954	775	170	154	5,277	81	15,590	\$2,153,748	\$879,960	\$1,808,900	\$731,529	\$344,848	\$148,431
1960	1,194	847	347	42,201	6,722	543	595	94	95	2,455	49	9,388	1,257,172	469,415	1,067,823	393,280	189,349	76,135
1961	827	561	266	30,055	5,408	411	180	76	59	2,822	32	6,202	896,576	410,545	741,077	338,249	155,499	72,296
Alabama	57	42	15	1,888	400		100	7	3	103	1	215	39,441	26,294	33,399	22,266	6,042	4,028
1960	30	24	6	598			100	5	1	93		65	13,149	8,766	11,829	7,886	1,320	880
1961	27	18	9	1,290	400			2	2	10	1	150	26,292	17,528	21,570	14,380	4,722	3,148
Alaska	6	3	3	75							1		7,800	4,425	3,400	2,212	4,400	2,213
1960	3	1	2								1		4,300	2,175	1,150	587	3,150	1,588
1961	3	2	1	75									3,500	2,250	2,250	1,625	1,250	625
Arizona	12	10	2	793			150	2			1	30	14,190	4,395	13,850	4,100	340	295
1960	7	5	2	218				1			1	30	4,090	1,545	3,750	1,350	340	195
1961	5	5		575			150	1					10,100	2,850	10,100	2,750		100
Arkansas	31	16	15	470				1			4	290	12,180	8,120	9,120	6,080	3,060	2,040
1960	11	5	6	215				1			2	85	6,240	4,160	5,190	3,460	1,050	700
1961	20	11	9	255							2	205	5,940	3,960	3,930	2,620	2,010	1,340
California	173	109	64	6,543	409		130	21	17	1,187	15	879	164,190	51,939	130,023	41,247	34,167	10,692
1960	98	65	33	4,790	129		130	7	12	527	6	319	112,128	36,222	95,286	31,325	16,842	4,897
1961	75	44	31	1,753	280			14	5	660	9	560	52,062	15,717	34,737	9,922	17,325	5,795

Summary of anticipated construction of hospitals and other medical facilities (under title VI of the Public Health Service Act) if there were no limitation on Federal assistance for fiscal years 1960 and 1961—Continued

State and program year	Number of projects			Beds or units added, by type of project										Estimated cost (thousands)				
				Part C				Part G										
	Total	Part C	Part G	General hos- pitals	Mental hos- pitals	Chronic hos- pitals	Tuber- culosis hos- pitals	Health center (units)	Diag- nosis or treat- ment (units)	Chronic hos- pitals	Reha- bilita- tion facili- ties (units)	Nurs- ing homes	Total cost	Federal share	Total cost	Federal share	Total cost	Federal share
Colorado.....	31	24	7	2,158	200			1	2			130	50,110	21,670	45,750	19,590	4,360	2,080
1960.....	25	21	4	1,748				1	2			45	33,850	15,050	30,550	13,500	3,300	1,550
1961.....	6	3	3	410	200							85	16,260	6,620	15,200	6,090	1,060	530
Connecticut.....	24	14	10	474	32			1	5		1	160	26,257	8,753	21,760	7,254	4,497	1,499
1960.....	16	9	7	38	32				3			160	13,027	4,343	10,190	3,397	2,837	946
1961.....	8	5	3	436				1	2		1		13,230	4,410	11,570	3,857	1,660	553
Delaware.....	6	4	2	225					1				6,120	2,000	5,620	1,750	500	250
1960.....	3	3		200									4,870	1,500	4,870	1,500		
1961.....	3	1	2	25					1				1,250	500	750	250	500	250
District of Columbia.....	7	5	2	950				1			1	200	21,500	7,366	16,500	5,366	5,000	2,000
1960.....																		
1961.....	7	5	2	950				1			1	200	21,500	7,366	16,500	5,366	5,000	2,000
Florida.....	59	42	17	2,478	575			3	5	260	5	105	58,012	21,142	49,542	16,906	8,470	4,236
1960.....	36	27	9	1,878	525			3	3	140	3	40	44,312	14,754	40,092	12,643	4,220	2,111
1961.....	23	15	8	600	50				2	120	2	65	13,700	6,388	9,450	4,263	4,250	2,125
Georgia.....	47	38	9	1,212	20				3	40	2	210	30,815	12,818	25,895	10,358	4,920	2,460
1960.....	24	18	6	531	20				3		1	160	13,605	5,704	10,985	4,394	2,620	1,310
1961.....	23	20	3	681						40	1	50	17,210	7,114	14,910	5,964	2,300	1,150
Idaho.....	21	11	10					1	4				4,485	2,254	2,220	1,111	2,265	1,143
1960.....	14	8	6						3				3,040	1,531	1,565	783	1,475	748

	7	3	4				1	1						1, 445	723	655	328	790	395
1961.....																			
Illinois.....	62	41	21	4, 440	380				6	540	2	435		138, 445	46, 150	113, 250	37, 752	25, 195	8, 398
1960.....	30	20	10	1, 625	50				3	240	1	180		52, 460	17, 488	42, 260	14, 088	10, 200	3, 400
1961.....	32	21	11	2, 815	330				3	300	1	255		85, 985	28, 662	70, 990	23, 664	14, 995	4, 998
Indiana.....	18	18		727	20									23, 908	7, 691	23, 908	7, 691		
1960.....	11	11		471	20									13, 908	4, 364	13, 908	4, 364		
1961.....	7	7		256										10, 000	3, 327	10, 000	3, 327		
Iowa.....	34	22	12						2					30, 880	9, 960	22, 270	7, 090	8, 610	2, 870
1960.....	25	16	9						2					22, 180	7, 060	16, 570	5, 190	5, 610	1, 870
1961.....	9	6	3											8, 700	2, 900	5, 700	1, 900	3, 000	1, 000
Kansas.....	26	18	8	570	500				1	50	1	260		29, 485	14, 333	24, 835	12, 008	4, 650	2, 325
1960.....	26	18	8	570	500				1	50	1	260		29, 485	14, 333	24, 835	12, 008	4, 650	2, 325
1961.....																			
Kentucky.....	87	85	2	1, 485								80		38, 434	23, 001	36, 134	20, 384	2, 300	2, 617
1960.....	45	43	2	650								80		14, 000	9, 224	11, 700	7, 517	2, 300	1, 707
1961.....	42	42		835										24, 434	13, 777	24, 434	12, 867		910
Louisiana.....	36	26	10	2, 505	1, 100				3		2			66, 650	32, 575	62, 400	30, 450	4, 250	2, 125
1960.....	17	11	6	1, 420					2		1			25, 850	12, 175	23, 300	10, 900	2, 550	1, 275
1961.....	19	15	4	1, 085	1, 100				1		1			40, 800	20, 400	39, 100	19, 550	1, 700	850
Maine.....	13	11	2	421					1			20		7, 030	3, 515	6, 760	3, 380	270	135
1960.....	8	6	2	207					1			20		3, 330	1, 665	3, 060	1, 530	270	135
1961.....	5	5		214										3, 700	1, 850	3, 700	1, 850		
Maryland.....	32	26	6	3, 450	785			2				181		82, 015	27, 450	80, 275	26, 750	1, 740	700
1960.....	28	23	5	3, 450	385							131		75, 625	13, 310	74, 005	12, 717	1, 620	593
1961.....	4	3	1		400			2				50		6, 390	14, 140	6, 270	14, 033	120	107
Massachusetts.....	28	27	1	886							1			19, 900	7, 960	18, 900	7, 560	1, 000	400
1960.....	15	14	1	455							1			10, 525	4, 010	9, 525	3, 810	1, 000	200
1961.....	13	13		431										9, 375	3, 950	9, 375	3, 750		200
Michigan.....	100	73	27	6, 286	1, 787			1	5	200	1	1, 490		158, 510	60, 568	137, 826	50, 476	20, 684	10, 092
1960.....	53	41	12	2, 460	1, 760			1	2		1	615		69, 325	26, 498	64, 291	23, 981	5, 034	2, 517
1961.....	47	32	15	3, 826	27				3	200		875		89, 185	34, 070	73, 535	26, 495	15, 650	7, 575

Summary of anticipated construction of hospitals and other medical facilities (under title VI of the Public Health Service Act) if there were no limitation on Federal assistance for fiscal years 1960 and 1961—Continued

Number of projects				Beds or units added, by type of project								Estimated cost (thousands)									
State and program year				Part C				Part G				Total program		Part C		Part G					
				Total	Part C	Part G	General hos- pitals	Mental hos- pitals	Chronic hos- pitals	Tuber- culosis hos- pitals	Health center (units)	Diag- nosis or treat- ment (units)	Chronic hos- pitals (units)	Reha- bilita- tion facili- ties (units)	Nurs- ing homes	Total cost	Federal share	Total cost	Federal share		
Minnesota.....				81	44	37	2,178	-----	-----	-----	1	-----	50	1	2,952	70,678	30,320	50,473	21,211	20,205	9,109
1960.....				52	30	22	1,324	-----	-----	-----	1	-----	50	1	2,034	48,900	20,514	35,200	14,336	13,700	6,178
1961.....				29	14	15	854	-----	-----	-----	-----	-----	-----	-----	918	21,778	9,806	15,273	6,875	6,505	2,931
Mississippi.....				16	12	4	892	-----	-----	-----	-----	300	1	-----	-----	22,585	17,690	15,085	12,690	7,500	5,000
1960.....				7	7	-----	522	-----	-----	-----	-----	-----	-----	-----	-----	8,952	7,285	8,577	7,035	375	250
1961.....				9	5	4	370	-----	-----	-----	-----	300	1	-----	-----	13,633	10,405	6,508	5,655	7,125	4,750
Missouri.....				25	17	8	636	89	314	-----	-----	4	1	187	-----	28,852	14,425	24,158	12,078	4,694	2,347
1960.....				13	9	4	464	39	57	-----	-----	3	1	-----	-----	18,407	9,203	15,883	7,941	2,524	1,262
1961.....				12	8	4	172	50	257	-----	-----	1	-----	-----	187	10,445	5,222	8,275	4,137	2,170	1,085
Montana.....				8	2	6	-----	-----	-----	-----	-----	-----	-----	-----	260	5,579	2,143	3,400	1,280	2,179	863
1960.....				5	1	4	-----	-----	-----	-----	-----	-----	-----	-----	140	2,479	903	1,200	400	1,279	503
1961.....				3	1	2	-----	-----	-----	-----	-----	-----	-----	-----	120	3,100	1,240	2,200	880	900	360
Nebraska.....				23	20	3	200	-----	-----	-----	-----	1	1	-----	-----	20,220	8,788	17,352	7,641	2,868	1,147
1960.....				11	10	1	200	-----	-----	-----	-----	-----	1	-----	-----	10,994	4,747	8,676	3,820	2,318	927
1961.....				12	10	2	-----	-----	-----	-----	1	-----	-----	-----	-----	9,226	4,041	8,676	3,821	550	220
Nevada.....				17	8	9	105	120	-----	80	-----	2	-----	-----	200	7,510	3,350	5,450	2,320	2,060	1,030
1960.....				11	5	6	75	50	-----	80	-----	2	-----	-----	110	4,460	1,965	3,300	1,385	1,160	580
1961.....				6	3	3	30	70	-----	-----	-----	-----	-----	90	3,050	1,385	2,150	935	900	450	-----
New Hampshire.....				16	10	6	191	-----	-----	-----	-----	4	1	25	-----	5,478	1,917	4,272	1,414	1,206	503
1960.....				11	8	3	166	-----	-----	-----	-----	2	1	-----	-----	3,730	817	3,120	662	610	155

[illegible]

AMOUNTS AVAILABLE BY STATES

Senator HILL. We also have a table showing the amount each State would receive under the full authorization, the amount available to each State under the 1959 appropriation, the 1960 budget estimate and the House allowance; also the differences between the various figures. This table will also be made a part of the record.

(The table referred to follows:)

HOSPITAL AND MEDICAL FACILITIES CONSTRUCTION PROGRAM, FISCAL 1960

Comparative statement, by States, of funds made available and authorized under appropriation "Grants for hospital construction, Public Health Service"

State	Authoriza- tion	1959 approp- riation	1960 estimate	Difference, 1960 estimate under 1959	House allowance	House allowance com- pared with—	
						Estimate	Authoriza- tion
Total.....	\$210, 000, 000	\$185, 000, 000	\$100, 000, 000	\$85, 000, 000	\$142, 500, 000	\$42, 500, 000	—\$67, 500, 000
Alabama.....	6, 868, 986	5, 976, 590	2, 978, 609	2, 997, 981	4, 323, 396	1, 344, 787	2, 545, 590
Alaska.....	500, 000	500, 000	500, 000	0	500, 000	0	0
Arizona.....	1, 600, 002	1, 500, 738	925, 314	575, 424	1, 265, 087	339, 773	334, 915
Arkansas.....	4, 147, 548	3, 608, 712	1, 833, 098	1, 775, 614	2, 652, 045	818, 947	1, 495, 503
California.....	9, 398, 415	8, 177, 401	4, 083, 635	4, 093, 766	5, 927, 321	1, 843, 686	3, 471, 094
Colorado.....	2, 052, 116	1, 868, 290	1, 070, 053	798, 237	1, 488, 471	418, 418	563, 645
Connecticut.....	1, 135, 182	1, 122, 858	732, 644	390, 214	967, 727	235, 083	167, 455
Delaware.....	500, 000	500, 000	500, 000	0	500, 000	0	0
District of Colum- bia.....	680, 556	680, 556	500, 000	180, 556	606, 334	106, 334	74, 222
Florida.....	5, 769, 415	5, 019, 871	2, 728, 664	2, 291, 207	3, 960, 606	1, 231, 942	1, 808, 809
Georgia.....	7, 216, 350	6, 278, 824	3, 183, 915	3, 094, 909	4, 621, 394	1, 437, 479	2, 594, 956
Idaho.....	1, 036, 690	1, 036, 690	692, 806	343, 884	906, 241	213, 435	130, 449
Illinois.....	6, 607, 211	5, 748, 825	3, 120, 273	2, 628, 552	4, 529, 018	1, 408, 745	2, 078, 193
Indiana.....	4, 753, 145	4, 135, 631	2, 288, 545	1, 847, 086	3, 321, 782	1, 033, 237	1, 431, 363
Iowa.....	3, 933, 464	3, 422, 442	1, 877, 201	1, 545, 241	2, 718, 264	841, 063	1, 215, 200
Kansas.....	2, 822, 231	2, 494, 363	1, 404, 467	1, 089, 887	2, 004, 607	600, 131	817, 624
Kentucky.....	6, 029, 313	5, 246, 005	2, 717, 884	2, 528, 121	3, 944, 959	1, 227, 075	2, 084, 354
Louisiana.....	5, 643, 839	4, 910, 609	2, 464, 253	2, 446, 356	3, 576, 818	1, 112, 565	2, 067, 021
Maine.....	1, 459, 430	1, 386, 460	843, 987	542, 473	1, 139, 569	295, 582	319, 861
Maryland.....	2, 678, 120	2, 377, 206	1, 389, 389	987, 817	1, 981, 323	591, 934	696, 797
Massachusetts.....	4, 335, 390	3, 772, 150	1, 847, 486	1, 924, 664	2, 673, 648	826, 162	1, 661, 742
Michigan.....	6, 272, 968	5, 458, 004	3, 215, 691	2, 242, 313	4, 667, 516	1, 451, 825	1, 605, 452
Minnesota.....	4, 366, 838	3, 799, 514	2, 026, 781	1, 772, 733	2, 941, 835	915, 054	1, 425, 003
Mississippi.....	5, 577, 407	4, 852, 809	2, 487, 895	2, 364, 914	3, 611, 134	1, 123, 239	1, 966, 273
Missouri.....	5, 131, 121	4, 464, 503	2, 313, 322	2, 151, 181	3, 357, 745	1, 044, 423	1, 773, 376
Montana.....	851, 056	851, 056	613, 757	237, 299	784, 241	170, 484	66, 815
Nebraska.....	2, 059, 612	1, 874, 384	1, 102, 269	772, 115	1, 538, 193	435, 924	521, 419
Nevada.....	500, 000	500, 000	500, 000	0	500, 000	0	0
New Hampshire.....	852, 405	852, 405	587, 670	264, 735	743, 978	156, 308	108, 427
New Jersey.....	3, 573, 604	3, 109, 332	1, 739, 442	1, 369, 890	2, 511, 423	771, 981	1, 062, 181
New Mexico.....	1, 396, 539	1, 335, 331	809, 414	525, 917	1, 086, 209	276, 795	310, 330
New York.....	11, 061, 931	9, 624, 801	4, 570, 945	5, 053, 856	6, 634, 643	2, 063, 698	4, 427, 288
North Carolina.....	9, 140, 807	7, 953, 263	4, 061, 695	3, 891, 568	5, 895, 476	1, 833, 781	3, 245, 331
North Dakota.....	1, 229, 729	1, 199, 721	748, 595	451, 126	992, 345	243, 750	237, 384
Ohio.....	8, 115, 582	7, 061, 230	3, 725, 695	3, 335, 535	5, 407, 779	1, 682, 084	2, 707, 803
Oklahoma.....	3, 618, 796	3, 148, 654	1, 684, 014	1, 464, 640	2, 428, 201	744, 187	1, 190, 595
Oregon.....	2, 002, 967	1, 828, 333	1, 084, 747	743, 586	1, 511, 149	426, 402	491, 818
Pennsylvania.....	11, 608, 384	10, 100, 260	5, 259, 401	4, 840, 859	7, 633, 923	2, 374, 522	3, 974, 461
Rhode Island.....	919, 227	919, 227	656, 189	263, 038	849, 728	193, 539	69, 499
South Carolina.....	5, 194, 846	4, 519, 950	2, 407, 229	2, 112, 721	3, 494, 049	1, 086, 820	1, 700, 797
South Dakota.....	1, 295, 120	1, 252, 882	795, 584	457, 298	1, 064, 866	269, 282	230, 254
Tennessee.....	6, 841, 081	5, 952, 309	3, 035, 254	2, 917, 055	4, 405, 616	1, 370, 362	2, 435, 465
Texas.....	13, 078, 437	11, 379, 329	5, 960, 431	5, 418, 898	8, 651, 456	2, 691, 025	4, 426, 981
Utah.....	1, 279, 501	1, 240, 183	796, 448	443, 735	1, 066, 200	269, 752	213, 301
Vermont.....	729, 998	729, 998	515, 222	214, 776	632, 165	116, 943	97, 833
Virginia.....	5, 868, 542	5, 106, 120	2, 718, 170	2, 387, 950	3, 945, 373	1, 227, 203	1, 923, 169
Washington.....	2, 522, 557	2, 250, 739	1, 342, 793	907, 946	1, 909, 409	566, 616	613, 148
West Virginia.....	3, 788, 521	3, 296, 329	1, 625, 437	1, 670, 892	2, 340, 249	714, 812	1, 448, 272
Wisconsin.....	4, 622, 986	4, 022, 384	2, 184, 428	1, 837, 956	3, 170, 657	986, 229	1, 452, 329
Wyoming.....	556, 950	556, 950	500, 000	56, 950	511, 378	11, 378	45, 572
Guam.....	150, 566	131, 004	67, 142	63, 862	97, 456	30, 314	53, 110
Hawaii.....	776, 593	776, 593	557, 653	218, 940	697, 652	139, 999	78, 941
Puerto Rico.....	5, 786, 699	5, 034, 911	2, 597, 124	2, 437, 787	3, 769, 677	1, 172, 553	2, 017, 022
Virgin Islands.....	61, 227	53, 271	27, 331	25, 940	39, 669	12, 338	21, 558

PROGRESS UNDER HILL-BURTON PROGRAM

Senator HILL. I think these tables will give us the picture of the need for these funds.

We will be delighted to have you proceed now, sir.

Dr. HALDEMAN. Mr. Chairman, we have made a considerable amount of progress under the Hill-Burton program, particularly in the construction of general hospitals, and especially in rural areas. The overall need, as reflected by the State plans, remains approximately the same as it has in previous years.

Our increasing population and the growing obsolescence of our facilities has prevented us from making as great a headway as we would like to. This has been particularly true in connection with facilities for long-term patients.

RESEARCH FUNDS

Another very important activity carried on under this appropriation is the rather small appropriation of \$1,200,000 for "Research experiments, and demonstrations."

These studies and demonstrations are aimed at developing more effective organizational patterns for the provision of health services, better techniques of hospital administration, improved design in the physical plant, as well as for better coordination of community health services.

We think that this is an extremely important part of our program. For example, our studies of progressive patient care are pointing the way to more efficient utilization of scarce hospital personnel, and at the same time, we feel, are improving services to the people.

Senator HILL. How many projects altogether have you requested at this time, Doctor? I do not know if this table tells us the full story. Is this table up-to-date now?

STATUS OF PROJECTS

Dr. HALDEMAN. Yes, sir. As of January 1 of this year it shows the number of projects which the States report to us would be ready to go if there were Federal funds available.

This information, as you know, is obtained at the request of this committee each year. It shows that in the fiscal year 1960 a total of 1,194 projects, involving a total construction cost of \$1,257 million would go forward if the funds were available. The Federal share would be \$469 million.

Senator HILL. Give us the figures for 1961, too.

Dr. HALDEMAN. There would be an additional 827 projects, involving an additional \$410 million of Federal funds. The total construction costs, including the matching money, would be approximately \$900 million.

Senator HILL. And, as you say, we have built many projects under this program due to the obsolescence of existing facilities and due to the steady increase in the population in the United States and we really have not been able to make any great strides forward, have we?

Dr. HALDEMAN. We have not been able to overcome the overall backlog; however, in the general hospital category, and particularly in rural areas, we have made substantial progress in the past 12 years.

Senator HILL. Well, you have done that, have you not?

Dr. HALDEMAN. That is correct.

Senator HILL. And this is particularly in the rural areas?

Dr. HALDEMAN. Yes, sir.

QUESTION OF BACKLOG OF WORK

Senator HILL. And with this increase in population and constant obsolescence of the old facilities we still have this. When I said "any great strides," I meant insofar as cutting down the backlog is concerned.

Now are there any questions?

Senator SMITH. You have cut down the backlog each year, have you not, or have you not been able to do that?

Dr. HALDEMAN. From the overall standpoint, the total number of beds needed remains about the same. For instance, according to State plans there is a total need over and above the number of existing acceptable hospital beds of about 120,000; this need has been almost constant. We have made progress in the general hospital category, particularly in rural areas, but because of the aging of our population and the increasing need for long-term beds in nursing homes and chronic disease hospitals, we, from an overall standpoint, have remained about stable.

SITUATION IN MENTAL HEALTH FIELD

For instance, in the mental hospital field we have actually fewer beds per thousand now than we had 10 years ago, despite the fact that the hospital admissions have substantially increased.

Senator HILL. However, this is on a matching basis, as I understand it?

Dr. HALDEMAN. Yes.

STATES AWAITING FEDERAL FUNDS

Senator SMITH. Are there many States awaiting Federal funds who have already appropriated their own funds?

Dr. HALDEMAN. Of course the applicants may be either governmental or other nonprofit organizations.

Senator SMITH. Yes.

Dr. HALDEMAN. Yes. I think a considerable portion of the projects I referred to, in answer to the chairman's question, have the matching funds available. Our experience with this annual survey has shown that it is realistic, because in subsequent years when money does become available the projects are built.

Senator SMITH. So that the Federal Government needs to step up its program rather than calling for the States and municipalities to do so? In other words, the States and the private groups are awaiting the Federal Government's action?

Dr. HALDEMAN. Well, in many instances they will wait, and in many instances, I am sure—as they have in the past—they will go ahead within the resources available and construct such facilities as are available with the funds at hand.

Senator HILL. But you have a large number of applicants here to the State health departments and they are the State agencies that

administer this program in the several States, and they advise you they are ready to go forward if the Federal funds are available, is that correct?

Dr. HALDEMAN. That is correct.

IMPROVEMENT IN STATES UNDER PROGRAM

Senator HILL. I want to emphasize one thing. You have done a fine job with this program. When I said you had not made great strides I meant insofar as cutting down the backlog. You have done many fine things and, if I may say so, one of the finest things has been to provide hospitals in the smaller communities in your more rural areas, having in mind that unless you have a hospital there you do not have a doctor, because after a young man has gone through medical school and has taken his internship and residency, naturally he does not want to practice where he does not have the tools to do what he feels is good work.

So, unless you have a hospital for that young doctor, you do not get him. I think that has been one of the finest contributions you have made, and certainly this program has been beautifully administered by you, Doctor, and your predecessors.

Senator MONRONEY. Mr. Chairman, I would like to agree with that, because many counties in my State never had an M.D. until the Hill-Burton program went into effect, and by making the program available we have caused a voluntary redistribution of modern medicine to the far reaches of the State.

QUESTION OF MATCHING OF FUNDS

Now, may I ask this question: When the program began it was on a 50-50 matching basis, I believe, and the committee later changed it so that they may match 50-50 but must match not less than a third; is that not right?

Senator HILL. It varies from a third to two-thirds, and under the law there is discretion in the State agency, which is your State health department, in which they can fix it within that range.

Senator MONRONEY. If I correctly understand the figures he gave me out of the 1,194 projects that are awaiting funds for 1960, the overall cost is \$1,257 million, but the Federal share of that is only \$469 million which is roughly about a third of the total cost. The figures show that the State authorities are getting the maximum local participation, even beyond the amounts required by the law. Their record proves that they are anxious to get more and more yield from the money that the Federal Government is able to put up for this program; is that correct?

Dr. HALDEMAN. That is correct, sir. We participate on the average in only about one-third of the total cost of approved Hill-Burton projects. The amount of participation, however, varies considerably throughout the country.

The reason is that with the Federal funds being somewhat restricted, in terms of demand, States have in many instances only been able to participate in a part of the hospital project.

EFFECT OF INCENTIVE OF FEDERAL FUNDS

Senator MONRONEY. It has been the incentive for the States and communities to get really very busy in order to use the funds to the greatest advantage.

Dr. HALDEMAN. I think some of the biggest gains we have had under the Hill-Burton program, in addition to the upgrading of the quality of medical care in rural areas, has been the initiation, for the first time, of truly statewide planning, for hospital construction. Hospital construction, during the early part of the century, when most of our hospitals were built, was largely haphazard, and primarily in areas having the money. Now we do have statewide planning which provides for much better hospital facilities and much less duplication.

Senator SMITH. Mr. Chairman, I would like to join with you in commending these people for their wonderful progress and the great contribution they have made along this line; but I also would like to say that if it had not been for the vision and insistence of the chairman of this committee, they would not have had the opportunity to have done what they have.

Senator HILL. If there has been any insistence, I would say it has been fully shared in by the distinguished Senator from Maine, because we have not had a battle yet without her fighting side by side with the Senator from Alabama, the Senator from Oklahoma, and the Senator from Nevada and other Senators, fighting for these funds. We have stood side by side together and certainly any good that has come about has been due to the fact that we have all fought together and had such great interest in the program and because, as I said earlier, of the very fine administration that the U.S. Public Health Service has given to this program, and I want to emphasize once again that when I spoke about that progress I was speaking only of the backlog.

COST OF PRESENTLY PROJECTED ACTIVITY

Senator MONRONEY. If I understand correctly, the 1,194 projects now waiting will take the \$42,500,000 added to this account by the House, will it not?

Mr. KELLY. Considerably more.

Senator HILL. Far more. You see, last year we had \$186,200,000 and \$1,200,000 of that was for the study to which Dr. Burney referred earlier, so we have \$185 million for construction, and even with the \$42,500,000 added by the House we would still only have some \$142,500,000 in comparison with the \$185 million we have for the present fiscal year.

Senator BIBLE. If I am clear on this, if I understand you correctly, you need an appropriation something in the neighborhood of \$500 million to meet the projected needs for hospital construction; is that correct?

SURVEYS OF STATE NEEDS

Dr. HALDEMAN. The States indicated they have eligible applicants ready to go which would require that amount of funds. I would like to say that we will do the best we can with the funds we get. Even with the \$100 million for grants that is contained in the President's budget, in accordance with his fiscal policy, we can have a very good

program, even though it does not meet the needs, and come up to authorization.

Mr. KELLY. I think it should be pointed out that we make this inquiry every year of the States as to how much can be built if funds were unlimited.

The authorization is \$210 million, but when we make the inquiry at this committee's request we do not ask them what they could do under that authorization but what they could do with unlimited Federal funds; so it is an unbiased survey of the total needs in the area.

Senator HILL. In other words, what we really ask them is how many projects they have that can go forward if there are general funds to match the local funds?

Mr. KELLY. That is right.

Senator SMITH. The most encouraging part of this is that the States and municipalities are contributing and working on the program.

Senator HILL. I might say that in my State of Alabama, not only the municipalities or your local communities, but the State of Alabama has several times passed State bond issues so that the State might help the local communities put up their share of these funds.

Are there any other questions?

If not, Dr. Haldeman, we thank you very much.

PREPARED STATEMENT

Senator HILL. Senators Humphrey and McCarthy have requested that their joint statement in support of appropriating the full amount of the authorization, \$210 million, for hospital construction be included in the record. Their statement will be included at this point.

(The statement referred to follows:)

STATEMENT OF SENATOR HUBERT H. HUMPHREY AND SENATOR EUGENE MCCARTHY IN SUPPORT OF AN INCREASED APPROPRIATION FOR HILL-BURTON FUNDS

Mr. Chairman, the President's recommended cutback in funds for hospital construction and other medical services under the Hill-Burton Act would stunt America's medical growth. The price of survival and the well-being of the Nation is high in this maddening pace of the 20th century. The needs of the times are many, and they must be met if we expect to maintain our poise, dignity, power, and prestige both at home and abroad. We submit that foremost among these needs is the need for more and better hospitals and medical facilities.

In our opinion, the President's recommended cutback in Hill-Burton funds represents a signal retreat in the face of the need for hospitals and medical facilities. The budget request of \$101,200,000 for Hill-Burton funds in fiscal 1960 is \$86 million less than was appropriated for the current fiscal year. What is the justification for this? Certainly it is not that what America needs most is a balanced budget. Certainly it is not that medical needs are diminishing. Certainly it is not that hospital and medical facilities are now adequate. We would like to know the reason for this cutback, Mr. Chairman, and so would the American people.

The people of Minnesota would like to know why they cannot have more Federal aid for the construction of hospitals and other medical facilities when such aid is so direly needed and when it could be so efficiently used.

We strongly urge the committee to approve the authorized \$210 million for Hill-Burton funds for the coming fiscal year, and we further urge that the ceiling of \$1,200,000 now contained in section 636 of the Public Health Service Act be removed so that increased Federal funds may be made available for special project grants for demonstrations for improving patient care services in hospitals and related care facilities.

HOSPITALS AND MEDICAL CARE

STATEMENT OF DR. KENNETH R. NELSON, CHIEF, DIVISION OF HOSPITALS; ACCOMPANIED BY DR. JAMES V. LOWRY, CHIEF, BUREAU OF MEDICAL SERVICES; MRS. APPOLLONIA O. ADAMS, CHIEF, DIVISION OF NURSING RESOURCES; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“For carrying out the functions of the Public Health Service under the Act of August 8, 1946 (5 U.S.C. 150), including **[\$1,866,000]** \$2,167,000 to be available only for payments for medical care of dependents and retired personnel under the Dependents’ Medical Care Act (37 U.S.C., chap. 7), and under sections **[307,]** 321, 322, 324, 326, 331, 332, 341, 343, 344, 502, 504, and 810 of the Public Health Service Act, Private Law 419 of the Eighty-third Congress, as amended, and Executive Order 9079 of February 26, 1942, including purchase and exchange of farm products and livestock; conducting research on technical nursing standards and furnishing consultative nursing services; purchase of not to exceed **[eleven]** *eight* passenger motor vehicles for replacement only; and purchase of firearms and ammunition; **[\$48,454,000]** \$45,600,000, of which \$1,000,000 shall be available only for payments to the Territory of Hawaii for care and treatment of persons afflicted with leprosy **[and \$330,000 shall be available for construction of buildings at Carville, Louisiana]**: *Provided*, That when the Public Health Service establishes or operates a health service program for any department or agency, payment for the estimated cost shall be made in advance for deposit to the credit of this appropriation.”

Amounts available for obligation

	1959 appro- priation ¹	1960 budget to Congress	1960 House allowance
Appropriation.....	\$48,454,000	\$45,600,000	\$45,600,000
Proposed supplemental due to pay increases.....	2,170,000	0	0
Advances and reimbursements from:			
Other accounts.....	4,164,050	4,226,000	4,226,000
Non-Federal sources.....	688,950	668,000	668,000
Total.....	55,477,000	50,494,000	50,494,000

¹ Does not include \$384,000 proposed supplemental submitted to the Senate, not considered by the House. This estimate was not known in time to be included in 1960 regular estimates.

Obligations by activities

Description	1959 estimate ¹		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Operation of hospitals.....	5,839	\$37,932,509	6,003	\$38,624,000	6,003	\$38,624,000
Operation of outpatient clinics and offices.....	473	5,229,600	473	5,244,000	473	5,244,000
Operation of health units.....	98	591,600	92	561,000	92	561,000
Coast Guard medical services.....	103	1,241,500	103	1,341,000	103	1,341,000
Development and coordination of nursing resources.....	53	439,800	45	330,000	45	330,000
Nurse training grants.....	0	5,950,000	0	0	0	0
Personnel detailed to other agencies.....	26	323,000	26	323,000	26	323,000
Dependents’ medical care.....	0	1,866,000	0	2,167,000	0	2,167,000
Payments to Hawaii.....	0	1,000,000	0	1,000,000	0	1,000,000
Administration.....	113	903,000	113	904,000	113	904,000
Total obligations for annual program.....	6,705	55,477,000	6,855	50,494,000	6,855	50,494,000

¹ Does not include \$384,000 proposed supplemental submitted to the Senate, not considered by the House. This estimate was not known in time to be included in 1960 regular estimates.

Obligations by objects

Description	1959 estimate, amount ¹	1960 estimate, amount	House allowance, amount
Total number of permanent positions.....	6,705	6,855	6,855
Full-time equivalent of all other positions.....	105	105	105
Average number of all employees.....	6,469	6,598	6,598
Number of employees at end of year.....	6,868	7,018	7,018
01 Personal service obligations.....	\$34,935,500	\$35,646,400	\$35,646,400
02 Travel.....	402,300	375,700	375,700
03 Transportation of things.....	355,500	364,300	364,300
04 Communication services.....	222,000	220,700	220,700
05 Rents and utility services.....	679,400	679,200	679,200
06 Printing and reproduction.....	108,000	105,400	105,400
07 Other contractual services.....	3,545,600	3,840,800	3,840,800
Services performed by other agencies.....	1,055,400	1,135,600	1,135,600
08 Supplies and materials.....	5,174,400	5,329,300	5,329,300
09 Equipment.....	688,900	754,500	754,500
10 Lands and structures.....	330,000	0	0
11 Grants, subsidies, and contributions.....	6,962,500	1,012,500	1,012,500
Contribution to retirement fund.....	1,604,500	1,631,700	1,631,700
15 Taxes and assessments.....	125,000	143,900	143,900
Subtotal.....	56,189,000	51,240,000	51,240,000
Deduct quarters and subsistence charges.....	-712,000	-746,000	-746,000
Total obligations.....	55,477,000	50,494,000	50,494,000

¹ Does not include \$384,000 proposed supplemental submitted to the Senate, not considered by the House. This estimate was not known in time to be included in 1960 regular estimates.

Summary of changes

	Positions	Amount
1959 actual appropriation.....	¹ 6,699	\$48,454,000
1959 supplemental appropriation.....		2,170,000
Total appropriation.....		50,624,000
Adjustments:		
Increased reimbursements.....		-156,000
Nonrecurring items:		
Nurse training grants.....	-10	-6,050,000
Nursing resources program.....		-19,100
Construction at Carville.....		-330,000
Revised 1959 base.....	6,689	44,068,900
1960 appropriation request.....	6,855	45,600,000
Net change requested.....	+166	+1,531,100

¹ Increased reimbursements in health units support 6 positions in addition to number originally estimated, making a total of 6,705.

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Position	Amount	Position	Amount
INCREASES				
For mandatory items:				
Extra day's pay (261 days in 1959 and 262 days in 1960)				
\$90,500 offset by absorption of \$3,000 in other objects				
in outpatient clinics activity.....		\$87, 500		\$87, 500
Rate increase in social security payments.....		18, 000		18, 000
Increased cost of incentive pay for commissioned officers.....		70, 000		70, 000
Increased cost of Federal and contract hospitalization				
due to additional day in 1960.....		10, 700		10, 700
Subtotal.....		186, 200		186, 200
For program items:				
Operation of hospitals:				
Additional staff for strengthening hospitals:				
Operation:				
164 positions.....	164	666, 300	164	666, 300
Related other objects.....		53, 600		53, 600
Increase in supplies, primarily to purchase supplies				
in 1960 which are being furnished by reduction of				
inventory in 1959.....		98, 000		98, 000
Increase of 3 cents in cost per ration served in gen-				
eral and special hospitals.....		50, 000		50, 000
Increase in equipment purchases.....		67, 000		67, 000
Subtotal.....	164	934, 900	164	934, 900
Coast Guard medical services:				
Increases in contractual services.....		77, 500		77, 500
Increase in supplies.....		12, 000		12, 000
Increase in equipment purchases.....		9, 000		9, 000
Subtotal.....		98, 500		98, 500
Development and coordination of nursing resources: In-				
crease to provide administrative funds in 1960 for liqui-				
dation of the program.....	2	10, 500	2	10, 500
Dependents' medical care: Increase to meet the higher cost				
of hospitalization.....		301, 000		301, 000
Total change requested.....	166	1, 531, 100	166	1, 531, 100

New positions requested, fiscal year 1960

	Grade	Posi- tions	Annual salary
Operation of hospitals:			
Medical officer.....	GS-12.....	1	\$8,341
Medical staff assistant.....	GS-11.....	2	14,060
Administrative staff assistant.....	GS-9.....	1	5,990
Medical staff assistant.....	GS-9.....	5	29,950
Nurse.....	GS-9.....	2	11,980
Housekeeper.....	GS-7.....	1	4,992
Medical staff assistant.....	GS-7.....	5	24,960
Medical staff technician.....	GS-7.....	1	4,992
Nurse.....	GS-7.....	1	4,992
Property management assistant.....	GS-7.....	1	4,992
Nurse.....	GS-6.....	23	103,339
Medical staff assistant.....	GS-5.....	4	16,224
Medical staff technician.....	GS-5.....	3	12,168
Nurse.....	GS-5.....	5	20,280
Property management assistant.....	GS-5.....	2	8,112
Clerical assistant.....	GS-4.....	4	15,060
Medical staff technician.....	GS-4.....	3	11,295
Nursing assistant.....	GS-4.....	5	18,825
Clerical assistant.....	GS-3.....	24	84,360
Dental staff technician.....	GS-3.....	9	31,635
Medical staff technician.....	GS-3.....	2	7,030
Nursing assistant.....	GS-3.....	16	56,240
Clerical assistant.....	GS-2.....	3	9,798
Custodial worker.....	GS-2.....	1	3,266
Medical staff technician.....	GS-2.....	1	3,266
Nursing assistant.....	GS-2.....	1	3,266
Grades established by act of July 1, 1944 (42 U.S.C. 207):			
Senior grade.....		4	47,744
Full grade.....		2	20,462
Senior assistant grade.....		8	68,688
Assistant grade.....		4	19,268
Ungraded positions at annual rates:			
Less than \$9,890:			
Custodial worker.....		6	19,820
Dietetic assistant.....		8	21,704
Housekeeping assistant.....		1	4,077
Laundry worker.....		2	8,404
Maintenance craftsman.....		3	13,852
Total new positions.....		164	743,432
Lapse.....			113,232
Net.....			630,200
Nursing resources:			
Clerical assistant.....	GS-5.....	1	4,056
Grades established by act of July 1, 1944 (42 U.S.C. 207):			
Senior grade.....		1	11,156
Total new positions.....		2	15,212
Lapse.....			7,112
Net.....			8,100

ORIGINAL REQUEST FOR FUNDS

Senator HILL. Next we have the Public Health Service hospitals and medical care program, which is headed by Dr. Nelson.

We are glad to have you here, sir.

I believe you had quite a reduction by the Budget this year. Mr. Kelly, what was the Department's original request for this item?

Mr. KELLY. The original request to the Department from the Public Health Service was \$50,100,000. The Department's preliminary request to the Budget Bureau was \$45,600,000, and the final request was for \$44,600,000.

The final allowance was \$43,500,000.

Senator HILL. \$43,500,000. According to the figure that I have before me, the budget estimate was \$45,600,000; is that correct?

Mr. KELLY. No.

Mr. DOWNEY. I think he is speaking about Indians.

Senator HILL. We are not speaking about Indians, but about hospitals and medical care, and what we used to know as marine hospitals.

Mr. KELLY. May I read the figures again?

The preliminary request from the Department was \$50,613,000. The tentative estimate to the Budget Bureau was for \$48,354,000; and the final request was \$46,454,000; and the final allowance \$45,600,000.

The earlier figures excluded dependents' medical care.

PREPARED STATEMENT

Senator HILL. All right, Doctor, we will be glad to have you file your statement at this point and address yourself to this item, sir.

(The statement referred to follows:)

STATEMENT OF CHIEF, DIVISION OF HOSPITALS, PUBLIC HEALTH SERVICE, ON HOSPITALS AND MEDICAL CARE

PURPOSE OF APPROPRIATION

Mr. Chairman and members of the committee, the "Hospitals and medical care" appropriation is utilized by the Public Health Service to conduct a program of health services to certain groups of persons whom the Congress has designated as eligible for medical care by the Federal Government. The largest single category is the American seaman who has been provided medical care since the establishment of the Marine Hospital Service under President John Adams in 1798. Other major beneficiary groups are officers and men of the U.S. Coast Guard, the Coast and Geodetic Survey, and the Public Health Service. Federal employees who are injured in the performance of their work are referred to us by the Bureau of Employees' Compensation for treatment and evaluation of their injuries. In addition to the 12 general medical and surgical, the Public Health Service operates 4 specialized hospitals. One is for the treatment and rehabilitation of persons with tuberculosis, two for persons addicted to narcotic drugs and other neuropsychiatric illnesses, and one for patients afflicted with leprosy. Reimbursements to the Territory of Hawaii for the care of leprosy patients in the islands are made from this appropriation. The "Hospitals and medical care" appropriation includes funds for resource studies and operational research directed toward the expansion and maximum utilization in the critically short field of nursing. Federal employee health programs for other agencies are conducted on a reimbursable basis and the assignments of Public Health Service officers to other Federal programs on a reimbursable basis are covered by this appropriation. The most recent added responsibilities covered by this appropriation are the medical care program for members of the uniformed services and their dependents under the Dependents' Medical Care Act and the provision of grants for professional nurse traineeships under the Health Amendments Act of 1956. The latter program expires at the end of fiscal year 1959.

ACCOMPLISHMENTS WITH INCREASES IN 1958 AND 1959 APPROPRIATIONS

In our opening statement before you last year, we reported on the serious staffing, equipment, and supply deficiencies in the hospitals and clinics and the assistance given in those areas in 1958 by the Bureau of the Budget, the President, and the Congress. In 1959, the Congress provided an increase of \$421,000 for the Carville Leprosarium. The \$421,000 increase for Carville provided \$91,000 for the initiation of formal training and research in the problems, causes, and treatment of leprosy and \$330,000 for the construction of patients' dwellings and staff quarters. We expect the construction to be completed during the current calendar year.

A \$3 million increase to a total of \$5,950,000 for the professional nurse training program was also provided by the Congress in 1959. These funds will provide approximately 2,000 nurses, this year, with better preparation to be administrators, teachers, and supervisors. Such traineeships have condensed the

average time span for this preparation from 15 to 18 years to 1½ to 2 years. A legislative proposal providing for extension of the authorization for this program, which expires June 30, 1959, is in process of preparation and clearance for submission to the Congress.

FUND REQUIREMENTS FOR 1960

The estimate of obligations of \$50,494,000 for 1960 provides for a net decrease of \$4,868,000, which is composed of the following items of increase and decrease, respectively:

INCREASES

Mandatory items:

Increased personal services cost due to additional day in 1960, \$90,500 offset by absorption of \$3,000 in other objects in out-patient clinics-----	\$87, 500
Increased cost of social security payments due to increased rates-----	18, 000
Increased cost of incentive pay for commissioned officers on duty in 1959-----	70, 000
Increased cost of Federal and contract hospitalization due to additional day in 1960 and to increased reimbursement rates--	10, 700

Program reinforcement:

Increased staff and related costs for improvement of medical care in the hospitals-----	719, 900
Net increase in supplies, primarily to purchase supplies in 1960 which were furnished by reduction of inventories in 1959----	98, 000
Increase of 3 cents per day in food allowance for general and special hospitals-----	50, 000
Additional equipment needs in the hospitals-----	67, 000
Additional contractual services, supplies, and equipment for Coast Guard program-----	98, 500
Liquidation of nurse training grants program-----	10, 500
Increased hospitalization of dependents under the dependents' medical care program-----	301, 000

Total increases-----	<u>1, 531, 100</u>
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The decreases proposed are related to items that are nonrecurring in 1960, as follows:

DECREASES

Nonrecurring item due to expiration of Nurse Training Grants program June 30, 1959 (\$5,950,000), and cost of administration (\$100,000)-----	6, 050, 000
Nonrecurring nurse training evaluation conference in 1959-----	19, 100
Nonrecurring construction of quarters and patient dwellings at the Carville Hospital in 1959-----	330, 000

Total decreases-----	<u>6, 399, 100</u>
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Net decrease in obligations-----	4, 868, 000
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The estimates before you proposes improvement in the hospitals and in the Coast Guard programs, additional resources for meeting the anticipated increased hospitalization costs in the dependents' medical care program, and decreases for nonrecurring costs in the professional nurse traineeship and Carville Hospital programs.

SEAMEN, COAST GUARD, AND GEODETIC SURVEY

Dr. NELSON. Mr. Chairman and members of the committee, the "Hospitals and medical care" appropriation provides funds for the Public Health Service to conduct a program of health services for the following beneficiaries:

American seamen, officers and enlisted personnel of the U.S. Coast Guard, and the Coast and Geodetic Survey, commissioned personnel

of the Public Health Service, members of the uniformed services and their dependents under the Dependents' Medical Care Act, Federal employees injured in the performance of their work, persons addicted to narcotic drugs, and persons afflicted with leprosy.

FEDERAL EMPLOYEE HEALTH PROGRAM

In addition, the appropriation provides funds for the following medical service programs:

Federal employee health programs and the assignments of Public Health Service officers to other Federal programs on a reimbursable basis, reimbursements to the State of Hawaii for the care of leprosy patients, funds for conducting resources and utilization studies in the critically short field of nursing, and funds for grants for professional nurse traineeships.

This latter program expires at the end of fiscal year 1959. A legislative proposal to extend the nurse training grant program is in process of preparation and clearance for submission to the Congress.

In our opening statement before your committee last year, we reported on the serious staffing, equipment, and supply deficiencies confronting the hospitals supported by this appropriation and upon the assistance given us in these areas in 1958 by the Bureau of the Budget, the President, and the Congress.

NURSES TRAINEESHIP PROGRAM

In 1959, the Congress provided major increases of \$3 million in the professional nurse traineeship program, and \$421,000 for research and construction at the Carville Leprosarium. Funds for the support of the remaining hospitals were granted to continue their activity at approximately the 1958 level.

The estimate of obligations of \$50,494,000 for 1960 provides for a net decrease of \$4,868,000.

The items of increase and decrease are as follows:

INCREASES

Mandatory increase items for increased rate of social security tax, increased incentive pay for commissioned officers, and costs arising from the extra day in 1960 and increased governmentwide reimbursement rates.....	\$186, 200
Improvement of hospital operations by additional staff, supplies, and equipment.....	934, 900
Providing additional medical services, supplies, and equipment to the Coast Guard.....	98, 500
Expenses of liquidation of nurse training grants program.....	10, 500
Increased hospitalization of dependents under the dependents' medical care program.....	301, 000
Total increases.....	1, 531, 100

DECREASES

Expiration of the nurse training grant program.....	6, 050, 000
Nonrecurring construction at the Carville Hospital.....	330, 000
Nonrecurring cost of nurse training evaluation conference.....	19, 100
Total decreases.....	6, 399, 100

I will be glad to give any additional information that I can which you may desire.

Mrs. Adams, Chief of the Division of Nursing Resources, is also available to answer questions on the nursing programs in this budget.

Senator HILL. Are the decreases that you have indicated here what accounts for the difference between the amount you had for this fiscal year and the amount of the budget estimate for the next fiscal year?

Dr. NELSON. Yes; it is, Mr. Chairman.

Senator HILL. The main item there of the decreases is the expiration of the nurse training grant program, is that not correct?

Dr. NELSON. That is correct, Mr. Chairman.

LEGISLATION TO EXTEND TRAINEESHIP PROGRAM

Senator SMITH. I notice that legislation is coming in asking for the extension of that program beyond June 30, 1959. Has that been sent in yet?

Mr. KELLY. As I understand it, legislation is actually pending in both Houses of Congress for the extension, but the administration is now working on a program of legislation to extend both the Public Health Service graduate nurse training program and the assistance to schools of public health, with some amendment in the extension.

That has not yet come up. It is under consideration in the Budget Bureau and we expect it to be submitted shortly.

Senator HILL. Do you think that that will be here shortly?

Mr. KELLY. I think so; yes, sir.

Senator HILL. But it is certainly not the intent to permit this nurse training grant program to expire?

Mr. KELLY. No; it is not, sir. We are notifying the States that if the legislation is extended, requests for funds will be forthcoming.

Senator HILL. That will be in the supplemental bill.

Senator SMITH. Is that request going to be delayed until the Budget acts on the other proposal?

Mr. KELLY. I think the real question is whether or not we get our amendments up to you early enough or whether or not the legislation is enacted by the Congress for a straight extension before we get them up, but we are hoping to get them up before that occurs.

Senator SMITH. It will be well to watch that, Mr. Chairman. It is very easy to delay.

Senator HILL. I shall endeavor to keep an eagle eye on it.

Senator SMITH. Thank you. I feel very comfortable now.

Senator HILL. But I shall ask you to assist me, as you do in so many ways.

NURSES TRAINEESHIP PROGRAM

Now, Mrs. Adams, we would like to have a word from you about your nurse training grant program.

Would you just summarize for the committee your program and its needs, present and future?

Mrs. ADAMS. Yes.

In the first 2 years of the program 1,837 nurses had some traineeship assistance. These are graduate nurses who are getting additional preparation as administrators, supervisors, and teachers, in all areas of the nursing service.

As to the schools participating, I can probably best show you that on a chart [indicating].

For the first year, the blue color shows you the States that had schools participating.

In the second year we had 2 additional schools that came in, in Montana, and in the third year we added additional programs, and now we have only about 12 States that do not have schools participating in the program.

The change in the trend of advance preparation for these needed positions is indicated by this data on 44 schools showing a trend line. There were 955 enrollments in 1956, when the traineeship program began, and in these 44 schools the trend would have gone down if the enrollments for preparation of administration, supervision, and teaching personnel had continued.

However, instead of that, it went up to 1,337 for a total enrollment in these 44 schools.

Senator HILL. It went up because of the incentive of these Federal funds; is that not right?

Mrs. ADAMS. Yes, Mr. Chairman.

EFFECTS OF PROGRAM

Another interesting piece of information is this: The total enrollment has gone up in these schools; it has stimulated these nurses who could afford, by other means, to pay for their education, to meet the competition. They have gone back to school, too; so the total enrollment in these programs has increased, as well.

We have been interviewing the employers of the returned trainees to see how this is really affecting patient care, because that is the end result that we are most interested in.

Although most of them have been employed for only 6 months, and we cannot get accurate information on all of them yet, we have very fine information on specific examples of patient care having been improved in specific hospitals because of better supervision or teaching in the school of nursing, or administration of the nursing program.

This year, the third year of the program, with the \$6 million allotted, we will be assisting approximately 2,000 nurses in the 88 schools that are now participating.

Senator HILL. There are now 88 participating schools?

Mrs. ADAMS. Mr. Chairman.

Senator HILL. Are there any questions?

NURSE SHORTAGE

Senator BIBLE. May I ask one question, Mr. Chairman? Is there still an alarming shortage of nurses throughout the United States?

Mrs. ADAMS. There are rather marked shortages in certain geographic areas and there are marked shortages in certain kinds of nursing services, such as psychiatric nursing and prepared supervisors, teachers, and administrators.

The Division has been doing some work for some time to find out, if possible, what is the cause of this, and what means can be used to alleviate the shortage, and we feel another approach to this assisting hospitals in the better use of the skills of their personnel.

IMPROVED USE OF SKILLS

We have developed a methodology in the Division with which we are now helping hospitals to improve the use of the skills of their nursing personnel. And from the few hospitals we have been able to help I have some specific charts on how a hospital can give more nursing care to more patients, and yet not increase the cost of nursing service.

I would like to give you just one hospital as an example.

Senator HILL. All right; give us that example.

Mrs. ADAMS. This is Jackson-Madison Hospital, Jackson, Tenn. This, Senator Bible, is one of the best approaches to nurse shortage. This was a good hospital and the reason I am using a good hospital is to show that you can even improve those who are doing a pretty good job.

This hospital indicates the amount of nursing personnel time they were using for nursing services which, you see, is 75 percent. Twenty-five percent was for something else.

Senator HILL. Something else other than nursing services?

Mrs. ADAMS. Yes, Senator Hill; other than nursing services. It might be for messenger or clerical or dietary services or it might be housekeeping. In other words, they thought they were buying 3.5 hours of nursing personnel care for each patient for 24 hours, but they are actually only buying two-thirds of that amount of time.

They were taught by personnel in the division how to make activity studies such as the following:

What do nurses do? How much time do they spend with patients? How much time is spent away from patients? How much is nursing? How much is nonnursing?

This [indicating] was the "before and after" picture of the first study they made.

The head nurse was spending 34 percent of her time in actual consideration of patient care.

After the second study they made, this went up to 68 percent.

I now have a figure for this last year which I just received about a week ago, and she is now spending 95 percent of her time. It takes about 2 to 3 years to get some of these overall changes made. There has been no turnover in this particular hospital so that no one could say, "Oh, but if you change nurses you may have more skilled people to do these kinds of activities."

Senator HILL. The personnel is about the same?

Mrs. ADAMS. Yes, the personnel is about the same. This, again [indicating] shows the head nurse level percentages. She spent her time in 1956 in six other areas and after the second study she spent it in only two. There was no time spent in the first study supervising the clerical staff and at the end of the second study there was about 15 percent of the time. This is another way, Senator Bible, of assisting with the shortage. The shortage is not just one of numbers. It is one involving the use of personnel.

SHORTAGE OF SPECIAL NURSES

Senator BIBLE. The thing I constantly hear of in my State is the particular shortage as to nurses specializing in clinical cases, for

example, heart cases, where they have to have around-the-clock care, and as to the possibility of getting special nurses who spend 100 per cent of their time on that particular case.

They tell me that there is a very critical shortage in that area.

Mrs. ADAMS. Special duty nurses at certain times of the year and in certain areas are very difficult to get.

Senator HILL. We appreciate your statement very much. We certainly do not want this program to lapse. It must go forward.

Mrs. ADAMS. Thank you very much.

DEPENDENTS' MEDICAL CARE PROGRAM

Mr. KELLY. Mr. Chairman, before leaving the hospitals and medical care program you may recall that you asked about the dependents' medical care program on which we had an adverse action taken on the supplemental bill, and I talked to it at the time the Secretary was here, and indicated we would submit more detail.

If agreeable, we have a more detailed statement we could submit for the record, which explains the problem there, and in effect the committee is being requested to make this an indefinite appropriation because of the difficulties we have in exercising control over this thing.

PREPARED STATEMENT

Senator HILL. All right; you submit that statement and we will not only put it in the record, but we will take a look at it and if we think we ought to have some witnesses we will advise you.

We will be glad to have that statement in the record.

(The statement referred to follows:)

Mr. Chairman and members of the committee, the Public Health Service shares your concern over the administration of this item in the appropriation for hospitals and medical care. Our concern has been intensified by the realization that last year the Congress was critical of the operation of this program and expressed their belief that there was an excessive amount of care being given in contract facilities without full utilization of existing uniformed service facilities.

The detailed statement on this point in the House report on Department of Defense appropriation for 1959 included the following comment which summarizes the viewpoint of that body:

"Despite a sizable reduction in the military personnel of the Armed Forces since the enactment of the law, the cost for fiscal year 1958 has grown to over \$75 million and for 1959 is estimated to be approximately \$70 million. One of the major reasons for these costs has been the failure of the Secretary of Defense to require that military medical facilities be used for the treatment of dependents where such facilities are adequate and available."

The Senate report on the same bill concurred on this point as follows:

"SECTION 633. MEDICAL CARE

"The committee agrees with the House in placing a limitation of \$60 million on obligations for the medical care of the dependents of military personnel in civilian hospitals and by civilian physicians and surgeons. The committee is strongly of the conviction that service hospitals, and medical and surgical facilities should be fully utilized by dependents of military personnel before they are permitted to charge the Government for medical service in nonmilitary facilities. The Congress has endeavored through the years to provide the best possible military medical care and facilities. It has been brought to the attention of the committee that these facilities are no longer being utilized to the fullest extent, so that the Government is bearing the duplicating cost not only of service facilities but also of medical care in civilian institutions. The com-

mittee is heartened by the recent position taken by the Department of Defense in reassuring the committee that fuller utilization of the uniformed services medical facilities will be emphasized. It is not the intent of this legislation to work hardships on service personnel or their dependents. It is the belief of the committee that under proper policy procedures, as indicated, the limitation will not result in such. In fact, the committee is hopeful that under the new policies and regulations to be instituted by the Department of Defense further reductions in ensuing years may be possible. The committee intends to watch this program closely and will be guided by subsequent information."

The basic legislation provides that the Secretary of Defense promulgates the regulations for this program after consultation with the Secretary of the Department of Health, Education, and Welfare. The Department of Health, Education, and Welfare is directly concerned with the medical care for the dependents of officers and enlisted personnel of the U.S. Coast Guard, officers of the U.S. Coast and Geodetic Survey, and commissioned personnel of the Public Health Service. Inasmuch as the costs of the program for these beneficiaries for whom the Public Health Service is responsible constitute only 2 percent of the total cost of the program, we find it difficult to divorce ourselves from the **military system** in order to insist on more stringent regulations for the entire body of beneficiaries. We are, therefore, in regular meetings and constant communication with the Department of Defense jointly searching for means whereby we can exercise greater control over the admission of our beneficiaries to our hospitals and other uniformed service hospitals, as well as greater control over the funds you make available to us for this purpose.

As a result of the criticism of this program last year by the Congress, the Department of Defense and the Department of Health, Education, and Welfare revised the joint regulations to tighten controls on the program and put greater emphasis on the use of existing uniformed service facilities. These new regulations and controls became effective October 1, 1958. Care had to be exercised in developing these new regulations so as not to deprive any beneficiaries of services provided by the basic legislation. The nature of these changes in the regulations was such, therefore, that they produced a delayed effect. Many patients were already under the care of private doctors in contract hospitals. Maternity cases who were in their second and third trimesters of pregnancy were allowed to continue under private care if it had already been arranged. When account is taken of the known lag in billings and this delay from maternity care, it is apparent that the full effect of the new regulations will not be felt until after this present fiscal year.

The Public Health Service has very few hospitals as compared to the military services, and only two hospitals which offer maternity care. Review of permits for care in contract facilities issued by Public Health Service units shows that 80 percent of these permits were issued for maternity care.¹ Because of the smaller number of our hospitals and the very limited maternity services in them, our beneficiaries are dependent upon military service facilities and contract hospitals for this particular type of medical care. A great percentage of our Coast Guard beneficiaries reside at small isolated stations at great distance from uniformed service facilities. No Coast Guard installation has a large hospital on it such as the military bases; rather they have infirmaries primarily for the care of active duty personnel. These factors necessitate high utilization of medicare funds by our beneficiaries, both in military hospitals and contract hospitals.

Our figures show that 40 percent of our dependents are hospitalized in our hospitals, 18 percent in military hospitals, and 42 percent in contract hospitals. It is true that of the funds appropriated to the Public Health Service for dependents medical care, 16.1 percent are for care in military hospitals, and 83.9 percent for care in contract hospitals. Our beneficiaries treated in our own hospitals, however, do not utilize these funds as the expenses of their care are covered in our regular appropriation for the operation of hospitals.

The expenses of the Public Health Service dependents who are cared for in private and other uniformed service hospitals are financed under a limitation in the appropriation language for hospitals and medical care. Provision for the Department of the Army and of the Air Force expense for the same purpose is made without limitation in their respective operation and maintenance funds,

¹ In addition, permits are issued by stations of the other uniformed services, including isolated units of the Coast Guard. No information is available as to the proportion of these permits which concern obstetrical care.

while the Department of the Navy has its outside costs provided for in its medical care funds, also without limitation.

None of these uniformed services were able to contain these expenses within the funds originally estimated to be used for this purpose. The Army and the Air Force, however, were able to find available funds within their total respective allowances for operation and maintenance in sufficient quantity to provide for the additional outside dependents medical care expense. The Department of the Navy did not have funds to cover this cost and accordingly requested supplemental funds in the amount of \$8,100,000 in the second supplemental appropriation bill 1959 to provide for "* * * emergency issues of medical supplies and equipment in support of Navy and Marine operations connected with the Lebanon-Taiwan crises, pay increases resulting from the passage of Public Law 85-462 and medical care of active and retired personnel and their dependents," as noted in the Senate report. This request was approved.

Senate Document No. 20, 86th Congress, 1st session included a proposed addendum to this same second supplemental appropriation bill, 1959, which would provide supplemental funds in the amount of \$384,000 for the hospitals and medical care appropriation to cover the cost of an increase in the number of patients hospitalized under the Dependents' Medical Care Act and in the cost of hospitalization of these beneficiaries. A corresponding increase in the limitation from \$1,866,000 to \$2,250,000 was also requested.

The Senate committee deferred action on this item by refusing the request with the following comment:

"The committee has omitted this item because it is greatly disturbed at the seeming failure of the services to use the Federal hospital facilities available rather than go to those of their own choosing. Out of the sum available for this purpose, \$1,866,000 in the regular 1959 appropriation, 83.9 percent will be spent for contract hospitalization and 16.1 percent in Federal hospital facilities.

"The committee will expect a full explanation of this failure at the hearing on the regular 1960 appropriation bill at which time further consideration will be given to making available additional funds for this purpose in fiscal year 1959.

"In the meantime the committee directs that a restudy be made by all the services concerned of the rules and regulations recently issued in the hope that they can be further tightened."

Following the comments in the recent Senate report on our supplemental request, we have considered methods of additional control over and above those prescribed in the joint regulations to exercise tighter controls on our beneficiaries. In every instance, they would result in mounds of paperwork and delays in getting the patients under treatment. We believe this effort would be expended without additional significant savings of money or increased utilization of uniformed service facilities. The only method by which we can effect appreciable additional savings is to act contrary to what we interpret as the intent of Congress—by denying eligible dependents the medical care to which they are legally entitled.

The history of the dependents' medical care program has been one of constant change in joint regulations since its inception on December 7, 1956. The changes have all been in the nature of tighter and tighter controls, but still with great precaution to protect the rights to services of the beneficiaries under the original act. The uniqueness of the administration of this appropriation wherein the basic legislation provides that we do not make the obligations and that we join with the military in establishing adequate controls make us ever cognizant of our responsibilities and in the vigilance we must exercise. Yet, in spite of great care and attention, the basic nature of the program prevents actual control of the expenses incurred.

These costs are uncontrollable because the number of patients varies with the prevalence and kinds of illness in the dependent group, which are not controllable by administrative determination, and because the amount of money involved varies with the facility in which care is given. This situation was summarized in the House report in the Urgent Deficiency Act of 1958, which recommended an indefinite appropriation in lieu of the deficiency request for an additional \$150,000 which was requested for the financing of this program.

The statement follows:

"HOSPITALS AND MEDICAL CARE (DEPENDENTS' MEDICAL CARE)

"The hearings on this item revealed that the Public Health Service could give no assurance that the estimate of additional needs, under the Dependents' Medical Care Act, was accurate even though less than 3 months remained in the fiscal year. It appears to the committee that the nature of these expenses is such that the Service can never be expected to make estimates of future needs with any assurance of accuracy. Inasmuch as these expenses are mandatory under the act and thus beyond administrative control, the committee is recommending an indefinite appropriation instead of the definite amount of \$150,000 which was requested."

The same solution for this problem was proposed by the Senate in connection with the original request for the funds which are the subject of the present supplemental request as stated in the committee report on the 1959 appropriation act, as follows:

"The committee recommends an allowance of \$48,730,000, an increase of \$4 million over the House allowance and \$4,421,000 over the budget estimate. The committee has also recommended an amendment to the language relating to medical care of dependents and retired personnel. It is proposed that the financing of medical care for dependents and retired personnel, which expenses are authorized by law and not subject to administrative control, be converted to an annual indefinite appropriation and combined with a similar account, "Retired pay of commissioned officers."

In summary, the administration of this item of our appropriation is unique to our experience. The basic legislation is of such nature that we are not making the obligations, therefore, as has been shown, it is most difficult to set up any known controls which would consistently and adequately control the expenditure of these funds. Under existing regulations, 58 percent of our beneficiaries under this program are cared for in Public Health Service or other uniformed service facilities.

With no previous history of a program of this nature and the constant change in it since its inception, it has not been possible to arrive at sound estimates despite our best efforts. Until experience, constant scrutiny, and repeated re-examination stabilize this program to the point where we can give good estimates, the funding of this program by an annual indefinite appropriation as has been previously recommended by this committee and the House committee would save us much embarrassment.

FOREIGN QUARANTINE ACTIVITIES

STATEMENT OF DR. ANDREW P. SACKETT, CHIEF, DIVISION OF FOREIGN QUARANTINE; ACCOMPANIED BY DR. JAMES V. LOWRY, CHIEF, BUREAU OF MEDICAL SERVICES; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For carrying out the purposes of sections 361 to 369 of the Act, relating to preventing the introduction of communicable diseases from foreign countries, the medical examination of aliens in accordance with section 325 of the Act, and the care and treatment of quarantine detainees pursuant to section 322(e) of the Act in private or other public hospitals when facilities of the Public Health Service are not available, including insurance of official motor vehicles in foreign countries when required by law of such countries, [\$4,108,000: *Provided*, That appropriations under this head for fiscal year 1958 are hereby made available for payment of overtime for the period July 1, 1957 to May 2, 1958 computed in accordance with administrative instructions issued November 4, 1957 by the Public Health Service, Division of Foreign Quarantine] \$4,460,000.

"[Section 364(c) of the Public Health Service Act, as amended, is amended to read as follows:]

“(c) The Surgeon General shall fix a reasonable rate of extra compensation for overtime services of employees of the United States Public Health Service, Foreign Quarantine Division, performing overtime duties including the operation of vessels, in connection with the inspection or quarantine treatment of persons (passengers and crews), conveyances, or goods arriving by land, water, or air in the United States or any place subject to the jurisdiction thereof, hereinafter referred to as “employees of the Public Health Service”, when required to be on duty between the hours of 6 o'clock postmeridian and 6 o'clock antemeridian (or between the hours of 7 o'clock postmeridian and 7 o'clock antemeridian at stations which have a declared workday of from 7 o'clock antemeridian to 7 o'clock postmeridian), or on Sundays or holidays, such rate, in lieu of compensation under any other provision of law, to be fixed at two times the basic hourly rate for each hour that the overtime extends beyond 6 o'clock (or 7 o'clock as the case may be) postmeridian, and two times the basic hourly rate for each overtime hour worked on Sundays or holidays. As used in this subsection, the term “basic hourly rate” shall mean the regular basic rate of pay which is applicable to such employees for work performed within their regular scheduled tour of duty.”

Amounts available for obligation

	1959 appropriations	1960 budget to Congress	1960 House allowance
Appropriation.....	\$4, 108, 000	\$4, 460, 000	\$4, 460, 000
Supplemental due to civil service pay raise.....	240, 000		
Appropriation or estimate.....	4, 348, 000	4, 460, 000	4, 460, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Positions	Amount	Positions	Amount	Positions	Amount
Examination of aliens and quarantine inspections at U.S. ports.....	511	\$3, 491, 600	511	\$3, 598, 100	511	\$3, 598, 100
Examination of visa applicants in foreign countries.....	73	585, 800	73	590, 300	73	590, 300
Administration.....	35	270, 600	35	271, 600	35	271, 600
Total obligations.....	619	4, 348, 000	619	4, 460, 000	619	4, 460, 000

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
Total number of permanent positions.....	619	619	619
Full-time equivalent of all other positions.....	8	8	8
Average number of all employees.....	555	564	564
Number of employees at end of year.....	582	592	592
01 Personal services:			
Permanent positions.....	\$3, 304, 700	\$3, 358, 600	\$3, 358, 600
Positions other than permanent.....	43, 800	43, 800	43, 800
Other personal services.....	265, 500	265, 500	265, 500
Total personal services.....	3, 614, 000	3, 667, 900	3, 667, 900
02 Travel.....	102, 700	102, 700	102, 700
03 Transportation of things.....	44, 200	44, 200	44, 200
04 Communication services.....	35, 400	36, 500	36, 500
05 Rents and utility services.....	30, 000	30, 000	30, 000
06 Printing and reproduction.....	14, 100	14, 100	14, 100
07 Other contractual services.....	202, 600	227, 700	227, 700
08 Supplies and materials.....	125, 300	125, 300	125, 300
09 Equipment.....	36, 400	66, 400	66, 400
11 Contributions to retirement.....	163, 400	165, 300	165, 300
15 Taxes.....	8, 900	8, 900	8, 900
Subtotal.....	4, 377, 000	4, 489, 000	4, 489, 000
Deduct quarters and subsistence charges.....	29, 000	29, 000	29, 000
Total obligations.....	4, 348, 000	4, 460, 000	4, 460, 000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	619	\$4, 108, 000
1959 supplemental appropriation.....	0	240, 000
Total appropriation.....	619	4, 348, 000
1960 appropriation request.....	619	4, 460, 000
Net change requested.....	0	112, 000

	1960 budget estimate	1960 House allowance
Increases: For mandatory items:		
Extra day's pay (261 days in 1959 and 262 days in 1960).....	\$12, 000	\$12, 000
Annualization costs for 13 additional positions authorized in 1959.....	22, 100	22, 100
Wage board salary scale increases.....	14, 900	14, 900
Increased cost of medical officers' incentive pay for 1 year additional service and mandatory pay increments under the Career Compensation Act.....	6, 400	6, 400
Subtotal.....	55, 400	55, 400
For program items:		
Boat repair.....	25, 000	25, 000
Equipment backlog.....	30, 000	30, 000
Recovery absorption of civil service pay raise.....	1, 600	1, 600
Total change requested.....	112, 000	112, 000

PREPARED STATEMENT

Senator HILL. Now we will have as your next item the "Foreign quarantine activities," and Dr. Sackett, we are ready to hear your statement.

(The statement referred to follows:)

STATEMENT OF CHIEF, DIVISION OF FOREIGN QUARANTINE ON FOREIGN QUARANTINE ACTIVITIES

PURPOSES OF THE PROGRAM

Mr. Chairman and members of the committee, the foreign quarantine program has two areas of major importance: (1) the medical examination of aliens in order to detect certain diseases of danger to our health and any medical condition which is excludable under the terms of the Immigration and Nationality Act and which may make the immigrant an economic burden to this country. The function is performed at designated consulates abroad and at ports of entry in this country; (2) the prevention of the introduction into this country and its insular possessions of serious communicable diseases and their vectors from abroad.

CURRENT CONDITIONS AFFECTING THE PROGRAM

Diseases such as smallpox, epidemic typhus, cholera, and malaria have been eliminated from this country as the result of effective public health programs. It is necessary that every method be used to prevent their reintroduction. The continued presence of foci of these and other serious infectious diseases throughout many parts of the world has been responsible for serious epidemics along the routes of international travel and commerce during the year. This results in substantial problems in trying to assure maximum protection of the United States with minimum interference with international commerce and travel.

There has been a great and continuing increase in international travel and commerce. During the 5-year period from 1953 to 1958, the total number of persons inspected for quarantine on arrival from abroad has increased by 25.1 percent to 5,217,627, the number of aircraft inspected by 43.4 percent to 68,703, and the number of ships inspected by 24 percent to 34,120. Indications are that the upward trend will continue as travel conditions insuring comfort, speed,

and economy make it possible for more travelers to take to the high seas or air. This trend has had a major impact on our workload and it will be further increased by the development of jet air passenger traffic.

It is estimated that in the 5-year period between 1955 and 1960, the number of aircraft to be inspected will have increased by 51.8 percent and the number of persons arriving by air by 147 percent, as shown below :

	1955	1960 estimate	Percent increase
Aircraft Inspections.....	54, 759	83, 100	51. 8
Inspections of persons arriving by aircraft.....	966, 140	2, 386, 800	147. 0

The speed and extent of international travel today are such that the factors of time and space which formerly operated as a protective barrier to the United States have been essentially eliminated. Travelers (our own citizens as well as aliens) can arrive here by plane from any area in the world in less than 3 days. This is less than the incubation period of most infectious diseases. Planes come here from countries or stop at countries en routes, which have a substantial incidence of serious infectious diseases. International air traffic is no longer confined to landings in coastal cities. Airports in the interior of the United States are used, bringing disease hazards to places far inland which have not before been exposed.

The opening of the St. Lawrence Seaway will bring ships from all parts of the world into our Great Lake ports and with them will come the threat of the diseases endemic in the countries at which they have stopped.

The extension of highway and railroad networks are linking Central America with the United States and are bringing the threat of diseases such as yellow fever and malaria to us by way of our southern border.

Direct commercial relationships are being established with countries so recently independent that they do not yet have health organizations that can control their diseases, which in some instances are of the epidemic type.

Many diseases such as encephalitis, yellow fever, malaria, and sleeping sickness are carried by insects such as mosquitoes. With the shortening of travel time it is becoming easier for insects to become stowaways on ships and planes and to reach our ports and inland cities where their presence constitutes a threat to our people.

Facilitation of travel and commerce is a recognized national goal. Therefore, in addition to protecting the health of the people of this country, we endeavor to facilitate the travel of residents of the United States to foreign countries by making readily available to them information regarding the health requirements of various countries to which they will go so that their travel will not be interrupted unnecessarily.

WORLD PREVALENCE OF DISEASES AFFECTING THE FOREIGN QUARANTINE PROGRAM

During the fiscal year 1958, the United States remained free from the occurrence or the introduction of any cases of quarantinable disease.

Smallpox

Smallpox has occurred, within the year, in epidemic form in all continents excepting North America and Australia. Foci of infection in other countries are a direct threat to this country by sea and air travel as shown by the behavior of this disease in the past year. Smallpox was spread in Asia in travel on surface craft between ports in Asia, between Asia and the Middle East, Asia and Africa, and Asia and Europe, and also within the Middle East. In summary, smallpox was spread between ports in 21 instances during this period.

For the week ending December 19, 1958, there were 20 African, 17 South American, and 24 Asian sea and airports (for a total of 61) reporting the presence of smallpox within the previous 3 months. For a similar period, the week ending May 16, 1958, 76 sea and airports reported smallpox present. In addition to the above foci at major points of entrance or exit from countries, the disease has been repeatedly epidemic in other areas within countries.

The continued presence of this disease along the routes of travel required the utmost vigilance to minimize the possibility of its introduction into the United States, where there has not been a case since 1953.

Yellow fever

This disease continues to be a threat to the southern part of the United States. The yellow fever virus is firmly entrenched in the jungles of Central and South America and Africa where it causes epizootics among monkeys. It is transmitted by several species of mosquitoes which in turn transmit the disease to humans who have not been immunized against the disease.

Between January 1 and December 10, 1958, the presence of yellow fever virus was reported in the following countries: Bolivia, Brazil, Colombia, Peru, Venezuela, and Guatemala. In Africa the yellow fever virus is present in all jungle areas.

All persons going into these areas should be immunized against yellow fever and the United States requires that persons be immunized who return from these areas within the incubation period of the disease.

Approximately 17,000 or 10 percent of all applicants for passports during the third quarter of 1958 indicated a visit into countries in the yellow fever endemic zone.

Cholera

Cholera was at an epidemic level higher than at any time in recent years. The disease spread from India and East Pakistan and maintained itself in major ports and airports of the countries involved. Nevertheless, the disease remained confined in the Far East.

Typhus

Louse-borne typhus occurred in countries of South America in the Andean region, in Mexico, and in areas of Eastern Europe, Africa, and Asia in the past year.

Plague

Sporadic localized outbreaks of plague in the Orient, Africa, and South America continued to characterize this disease in the past year. Current sanitation practices designed to eliminate rats from port areas and aboard ships serve as the basic barrier against spread of this disease into the United States.

REQUIREMENTS FOR 1960

The work of the Foreign Quarantine Division in preventing the introduction of disease into this country is carried out at 310 points in the United States and its insular possessions. Local physicians carry out our work on a contract basis where this is more economical. Medical examinations of aliens are performed at 28 of the principal consulates in Europe, Canada, Mexico, and at Hong Kong, under the supervision of Public Health Service medical officers assisted by local physicians and technical assistants.

The increase of \$110,400 included in the 1960 estimate is needed for the following purposes:

- | | |
|--|-----------|
| 1. Mandatory payments in connection with personal services----- | \$55, 400 |
| These include annualization of additional inspection staff authorized for 1959; increased costs of medical officers' incentive pay for 1 year's additional service and mandatory pay increments under the Career Compensation Act; cost of 1 additional day's pay in 1960; and wage board salary scale increases. | |
| 2. Equipment backlog----- | 30, 000 |
| This is a partial step toward meeting the backlog in station equipment needs, for new items to meet increased workloads, long needed items for which funds have not been available, and replacements of items uneconomical to continue to use. It includes maintenance equipment, technical items, and office equipment. | |
| 3. Major boat repairs----- | 25, 000 |
| These are exclusive of routine drydocking and painting. They include rebuilding of engines, replacement of guardrails, storage batteries, and boat heating systems. | |

In summary, as long as dangerous contagious diseases exist in areas linked to this country by international travel routes, an effective quarantine service must be maintained for the protection of this country.

AREAS OF WORK UNDER PROGRAM

PURPOSES OF THE PROGRAM

Dr. SACKETT. Mr. Chairman and members of the committee, the foreign quarantine program has two areas of major importance:

- (1) The medical examination of aliens in order to detect certain diseases of danger to our health and any medical condition which is excludable under the terms of the Immigration and Nationality Act and which may make the immigrant an economic burden to this country. The function is performed at designated consulates abroad and at ports of entry in this country;
- (2) the prevention of the introduction into this country and its insular possessions of serious communicable diseases and their vectors from abroad.

CURRENT CONDITIONS AFFECTING THE PROGRAM

Diseases such as smallpox, epidemic typhus, cholera, and malaria which have been eliminated from this country by effective public health programs have appeared in epidemic form along the routes of international travel and commerce during the year.

This has caused substantial problems in assuring maximum protection of the United States with minimum interference with international commerce and travel.

The great and continuing increase in international travel and commerce has had a major impact on our workload and it will be increased by the development of jet air passenger traffic.

The speed and extent of international travel today have essentially eliminated time and space as a protective barrier for the United States. Facilitation of travel and commerce is a recognized national goal. The division of foreign quarantine makes readily available to residents of the United States information regarding health requirements of other countries so that their travel will not be interrupted unnecessarily.

WORLD PREVALENCE OF DISEASE

During the fiscal year 1958, the United States remained free from the occurrence or the introduction of any cases of quarantinable disease.

Smallpox occurred within the year in epidemic form in all continents excepting North America and Australia and it was spread between ports in 21 instances during this period.

For the week ending December 19, 1958, there were 20 African, 17 South American, and 24 Asian sea and airports—for a total of 61—reporting the presence of small pox within the previous 3 months.

For a similar period, the week ending May 16, 1958, 76 sea and airports reported smallpox present.

In addition to the above foci at major points of entrance or exit from countries, the disease has been repeatedly epidemic in other areas within countries. The continued presence of this disease along the routes of travel requires the utmost vigilance to minimize the possibility of its introduction into the United States, where there has not been a case since 1953.

Yellow fever continues to be a threat to the southern part of the United States. Between January 1 and December 10, 1958, the presence of yellow fever virus was reported in Bolivia, Brazil, Colombia, Peru, Venezuela, and Guatemala.

In Africa the yellow fever virus is present in all jungle areas.

Approximately 17,000, or 10 percent, of all persons receiving passports during the third quarter of 1958 were going into countries in the yellow fever endemic zones. All persons going into these areas should be immunized against yellow fever and the United States requires the immunization of all persons returning from these areas within the incubation period of the disease.

Cholera was at an epidemic level higher than at any time in recent years. The disease spread from India and East Pakistan to involve Thailand and West Pakistan and maintained itself in major ports and airports of the countries involved. Nevertheless, the disease remained confined in the Far East.

Louse-borne typhus occurred in countries of South America in the Andean region, in Mexico, and in areas of eastern Europe, Africa, and Asia in the past year.

Plague occurred in sporadic localized outbreaks in various areas of the world in the past year. Current sanitation practices designed to eliminate rats from port areas and aboard ship serve as the basic barrier against spread of this disease into the United States.

REQUIREMENTS FOR 1960

The work of the Foreign Quarantine Division in combating the introduction of disease into this country is carried out at 310 points in the United States and its insular possessions and at 28 of our principal consulates.

The increase of \$112,000 included in the 1960 estimate is needed for the following purposes:

(1) Mandatory payments in connection with personal services, \$55,400.

These include annualization of additional inspection staff authorized for 1959; increased costs of medical officers' incentive pay for 1 year additional service and mandatory pay increments under the Career Compensation Act; 1 additional day's pay in 1960; and Wage Board salary scale increases.

2. Equipment backlog, \$30,000.

This is a partial step toward meeting the backlog in station equipment needs, for new items for which funds have not been available, and replacements of items uneconomical to continue to use.

3. Major boat repairs, \$25,000.

These are nonroutine repairs.

4. Recovery of absorption of civil service pay raise, \$1,600.

In summary, as long as dangerous contagious diseases exist in areas linked to this country by international travel routes, an effective quarantine service must be maintained for the protection of this country.

WORK ALONG MEXICAN BORDER

Senator HILL. Doctor, let me ask you this question: Last year this committee and the Senate made an addition of \$85,000 in the appropriation and the committee report states as follows:

The committee also recommends \$85,000 to provide additional coverage on the Mexican border. The committee was advised that at present, of 25 ports of entry, the number with adequate coverage is only two, El Paso and Laredo, with partial coverage of 13 points and with no coverage at 10 points. This additional sum here recommended for more adequate coverage of the border will permit the Service to add some 20 inspectors to give at least partial coverage at the ports of entry.

Did you ask for any funds for these points not covered?

Mr. KELLEY. Mr. Chairman, that was considered in the development of this year's budget and was not included in the final recommendation.

Senator HILL. The Department did not ask for it?

Mr. KELLEY. No.

Senator HILL. Now you have heard the statement I just read from the committee report. Does the situation exist today as it did a year ago?

Dr. SACKETT. Yes, sir. The program on the Mexican border is conducted at essentially the same level as 1 year ago.

Senator HILL. In other words, you have not been able to put any more inspectors there insofar as this budget estimate for next year is concerned? You do not have any funds for additional inspectors; is that right?

Dr. SACKETT. That is right.

OPENING OF BRIDGE AT CORDOVA ISLAND

Senator HILL. Is it not also true that another crossing point is to be established at El Paso, Tex.?

Dr. SACKETT. I understand that there has been some discussion regarding the opening of a bridge at Cordova Island, Mr. Chairman.

Senator HILL. I think it would be well for you to furnish the committee with a table which would show your request of the Department, the Department's request to the Bureau of the Budget, and where the additional personnel would be used, as well as that required for Cordova Bridge. You might also show the comparative coverage by the Customs Service and the Immigration Service.

Dr. SACKETT. Yes, sir.

(The table referred to follows:)

Entries of persons at Mexican border points of entry, Federal inspectional personnel on duty,¹ additional quarantine inspectors and funds requested for fiscal year 1960, and requirements at Cordova Island

State and point of entry	Total entries of persons fiscal year 1958 ²	Customs inspectors on duty	Immigration inspectors on duty	Quarantine inspectors		
				On duty	Fiscal year 1960 request	
					To department	To Bureau of Budget
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Arizona:						
Douglas.....	2,758,750	7	6	1	3	1
Lochiel.....	6,976	0	0	0	0	0
Lukeville.....	163,689	2	2	0	1	1
Naco.....	884,008	5	4	0	2	0
Nogales.....	6,229,997	36	16	4	7	5
San Luis.....	1,672,697	3	4	1	3	1
Sasabe.....	106,773	2	2	0	1	0
California:						
Andrade.....	229,413	2	1	0	1	0
Calexico.....	8,661,008	21	20	1	5	2
San Ysidro.....	16,120,228	29	25	4	9	4
Tecate.....	266,084	2	2	0	1	0
New Mexico:						
Antelope Wells.....	4,800	0	0	0	0	0
Columbus.....	169,477	2	3	0	1	1
Texas:						
Brownsville.....	5,360,220	27	20	6	9	6
Del Rio.....	1,387,581	6	7	2	4	3
Eagle Pass.....	2,837,054	8	9	4	6	4
El Paso Cordova Island ³	24,599,137	36	34	13	15	13
Fabens.....	470,671	2	2	0	1	0
Falcon Dam.....	311,793	2	2	1	1	1
Hidalgo.....	5,337,164	15	17	6	8	6
Laredo.....	7,922,968	38	21	13	13	13
Los Ebanos.....	(⁴)	0	1	0	0	0
Presidio.....	359,159	3	3	0	1	1
Progreso.....	403,554	2	2	1	1	1
Rio Grande City.....	46,108	1	1	0	0	0
Roma.....	424,506	2	4	2	2	2
Yaleta.....	1,986,037	2	2	2	3	2
All points of entry.....	88,719,852	255	210	61	98	67

	Positions	Man-years	Amount		
			Personal services	Other objects	Total
Request for increase to Department.....	37	31.4	\$163,000	\$14,900	\$117,900
Department's increase requested of Bureau of the Budget.....	6	5.1	23,700	4,800	28,500
Additional requirement for Cordova Island ³ not included in any 1960 budget request.....	10	8.5	38,000	9,900	47,900

¹ Inspectors and supervisors.

² U.S. Bureau of Customs figures.

³ Proposed new point of entry at El Paso, to be opened in summer, 1959.

⁴ Not available.

RELATION TO AIRLINE TRAVEL

Senator HILL. Are there any questions?

Senator MONRONEY. I believe with the airlines, both United States and foreign, there are charges for customs inspection required when planes arrive at odd hours.

Is that the case with the quarantine program? Do you make any charges against the airlines for arrivals after business hours?

Dr. SACKETT. If the airline operates on a published schedule, if it is a scheduled flight, there is not any charge for the service. If it is a nonscheduled flight, a charge is made.

Senator MONRONEY. Supposing it is 6 hours late and your inspectors have to wait, through no fault of their own, for the arrival of the plane, is there any charge made in that case?

Dr. SACKETT. We have been advised that even under this condition if the flight operates under a published schedule, even though it does not adhere to that schedule, nevertheless the service is provided without charge.

Senator MONRONEY. At Idlewild you have to keep three shifts working through the full 7 days each week, do you not?

Dr. SACKETT. Yes, sir.

Senator HILL. Are there any other questions? If not, we thank you very much, Doctor.

Dr. SACKETT. Thank you, sir.

INDIAN HEALTH ACTIVITIES

STATEMENT OF DR. JAMES R. SHAW, CHIEF, DIVISION OF INDIAN HEALTH; ACCOMPANIED BY DR. JAMES V. LOWRY, CHIEF, BUREAU OF MEDICAL SERVICES; DR. LEROY E. BURNEY, THE SURGEON GENERAL, PUBLIC HEALTH SERVICE; ROY L. HARLOW, CHIEF FINANCE OFFICER, DIVISION OF FINANCE, OFFICE OF THE SURGEON GENERAL; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“For expenses necessary to enable the Surgeon General to carry out the purposes of the Act of August 5, 1954 (42 U.S.C. 2001) (including not to exceed \$10,000 for temporary services at rates not to exceed \$100 per diem for individuals, when authoriezd by the Surgeon General) ; purchase of not to exceed **【twenty-five】** *thirty* passenger motor vehicles, of which *twenty* shall be for replacement only ; hire of passenger motor vehicles and aircraft ; purchase of reprints ; payment for telephone service in private residences in the field, when authorized under regulations approved by the Secretary ; and the purposes set forth in section 321, 322(d), 324, and 509 of the Public Health Service Act ; **【\$40,473,000】** *\$43,500,000.*”

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$40, 473, 000	\$43, 500, 000	\$45, 500, 000
Proposed supplemental.....	1, 854, 000		
Contract authorization (48 U.S.C. 50 d-1; 42 U.S.C. 2001).....	510, 315	510, 315	510, 315
Applied to contract authorization (48 U.S.C. 50 d-1; 42 U.S.C. 2001).....	—510, 315	—510, 315	—510, 315
Total obligations.....	42, 327, 000	43, 500, 000	45, 500, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Hospital health services.....	3,734	\$25,709,500	3,802	\$26,367,000	3,991	\$27,657,000
2. Contract patient care.....	0	8,008,000	0	8,008,000	0	8,008,000
3. Field health services.....	808	7,185,000	875	7,700,500	971	8,410,500
4. Program direction.....	154	1,424,500	154	1,424,500	154	1,424,500
Total obligations.....	4,696	42,327,000	4,831	43,500,000	5,116	45,500,000

Obligations by objects

Description	1959 estimate		1960 estimate		House allowance	
Total number of permanent positions.....	4,696		4,831		5,116	
Full-time equivalent of all other positions.....	87		91		111	
Average number of all employees.....	4,565		4,680		4,941	
Number of employees at end of year.....	4,800		4,900		5,230	
Average GS grade and salary.....	5.1	\$4,781	5.1	\$4,769	5.1	\$4,737
Average salary of ungraded positions.....	\$4,329		\$4,327		\$4,574	
01 Personal services:						
Permanent positions.....	\$22,500,100		\$22,865,320		\$24,297,667	
Positions other than permanent.....	419,900		451,350		527,350	
Other personal services.....	1,532,400		1,592,630		1,656,483	
Total personal services.....	24,452,400		24,909,300		26,481,500	
02 Travel.....	1,195,450		1,272,600		1,335,300	
03 Transportation of things.....	390,200		408,700		426,400	
04 Communication services.....	225,200		243,100		248,200	
05 Rents and utility services.....	405,800		406,700		411,700	
06 Printing and reproduction.....	75,400		76,400		76,400	
07 Other contractual services.....	9,832,850		9,923,100		10,025,100	
Services performed by other agencies.....	467,000		467,000		467,000	
08 Supplies and materials.....	4,217,250		4,516,800		4,615,300	
09 Equipment.....	365,700		586,600		631,400	
11 Grants, subsidies, and contributions.....	1,320,600		1,338,100		1,406,900	
15 Taxes and assessments.....	74,850		80,100		103,300	
Subtotal.....	43,022,700		44,228,500		46,228,500	
Deduct quarters and subsistence charges.....	695,700		728,500		728,500	
Total obligations.....	42,327,000		43,500,000		45,500,000	

New positions requested

	Grade	Annual salary
Hospital health services:		
(6) Medical staff assistant.....	GS-11.....	\$42, 180
(4) Dietitian.....	GS-9.....	23, 960
(2) Nurse.....	GS-9.....	11, 980
(2) Nurse.....	GS-7.....	9, 984
(8) Nurse.....	GS-6.....	35, 944
(8) Clerical assistant.....	GS-5.....	32, 448
(18) Nursing assistant.....	GS-4.....	67, 770
(8) Clerical assistant.....	GS-4.....	30, 120
Grades established by act of July 1, 1944 (42 U.S.C. 207):		
(2) Full.....		22, 502
(4) Senior assistant.....		29, 712
Ungraded positions at hourly rates:		
(21) Equivalent to less than \$9,890.....		91, 644
Gross cost (83) ¹		398, 244
Lapse.....		139, 144
Net.....		¹ 259, 100
Field health services:		
(2) Public health program specialist.....	GS-12.....	16, 682
Medical staff assistant.....	GS-11.....	7, 030
(2) Medical staff assistant.....	GS-9.....	11, 980
(2) Nurse.....	GS-9.....	11, 980
Nurse.....	GS-8.....	5, 470
(3) Nurse.....	GS-6.....	13, 479
(3) Nurse.....	GS-5.....	12, 168
(5) Dental staff technician.....	GS-5.....	20, 280
Engineering assistant.....	GS-5.....	4, 056
(4) Nursing assistant.....	GS-4.....	15, 060
(10) Clerical assistant.....	GS-3.....	35, 150
Medical staff technician.....	GS-3.....	3, 515
Nursing assistant.....	GS-3.....	3, 515
(6) Engineering assistant.....	GS-3.....	21, 090
(2) Dental staff technician.....	GS-3.....	7, 030
(2) Custodial worker.....	GS-3.....	7, 030
Grades established by act of July 1, 1944 (42 U.S.C. 207):		
Senior.....		13, 376
(14) Senior assistant.....		115, 572
(3) Assistant.....		14, 451
Ungraded positions at hourly rates:		
(3) Equivalent to less than \$9,890.....		10, 983
Gross cost (67).....		349, 897
Lapse.....		51, 122
Net.....		298, 775

¹ Partially offset by reduction of 15 positions and \$37,100.

Summary of changes

	Positions	Amount
1959 actual appropriation.....	4, 696	\$40, 473, 000
1959 supplemental appropriation.....		1, 854, 000
Total appropriation.....	4, 696	42, 327, 000
1960 appropriation request.....	4, 831	43, 500, 000
Net change requested.....	+135	+1, 173, 000

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
INCREASES				
For mandatory items:				
Extra day's pay (261 days in 1959 and 262 days in 1960).....		\$60, 475		\$60, 475
Annualization of social security increases.....		3, 700		3, 700
Postage rate increases absorbed in 1959.....		12, 000		12, 000
Wage-board increases included in 1959 supplemental but not budgeted in 1960.....		-202, 004		-202, 000
Wage-board costs supported out of House increase.....		0		¹ 290, 000
Subtotal.....		-125, 825		164, 175
For program items:				
Hospital health services:				
(a) New positions to strengthen services.....	83	250, 000	272	1, 111, 100
(b) Increased requirements for subsistence, drugs and medical supplies due to an expanding workload, and use of more effective drugs and medical supplies.....		268, 800		268, 800
(c) Contractual services to provide fee basis consultants in specialized medical fields and laboratory services.....		50, 000		150, 000
(d) Increase in outside the service training for medical officers and inservice training for certain other professional categories.....		80, 000		80, 000
(e) New and replacement equipment for hospitals.....		189, 000		189, 000
(f) Other nonsalary costs (travel, transportation, etc.).....		10, 800		49, 700
(g) Deduct nonrecurring positions and related costs resulting from closure of Colville Hospital in January 1959.....	-15	-55, 500	-15	-55, 500
Field health services:				
(a) Sanitation services: New positions and supporting expense to provide increased service coverage.....	12	60, 820	12	60, 820
(b) Dental services: New positions and expanding program in remote areas where services have not been available.....	9	57, 125	22	158, 125
(c) Public health nursing: New positions and supporting expense for additional services.....	17	78, 500	17	78, 500
(d) Health education: New positions and supporting expense.....	3	27, 340	3	27, 340
(e) Field medical services: New positions and supporting expenses for additional services.....	26	226, 440	109	835, 440
(f) Add amount for the full-year operation of the Colville field health center established in January 1959.....		55, 500		55, 500
Total change requested.....	135	1, 173, 000	420	3, 173, 000

¹ If the action of the House in proposing an increase of \$2,000,000 is not ultimately sustained, a supplemental appropriation request for wage board increases occurring in 1959 will be presented at a later date.

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$2 million for Indian health activities. As the Secretary indicated this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

This will permit the Public Health Service to provide additional hospital and health services to our Indian beneficiaries by broadening and intensifying the attack on their serious health deficiencies. Of the \$2 million, \$1,290,000 will be expended in the hospitals to provide 189 additional professional medical personnel, supporting staff, and related costs. Funds of \$710,000 will be expended in the field health centers, clinics, and field health station activities, to provide 96 additional professional medical and dental personnel, supporting staff, and related costs.

As stated by the Secretary when he appeared before the committee such an increase would further contribute to inflation and weakening of the national

economy. The Department has recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

PREPARED STATEMENT

Senator HILL. All right, Dr. Shaw, we would be glad to have you address yourself to these items of Indian health activities and then your other item of construction of Indian health facilities.

Dr. SHAW. Thank you, sir. I would like to read the summary of my opening statement.

Senator HILL. All right, Doctor, proceed.

Your statement will appear in full in the record.

(The statement referred to follows:)

STATEMENT OF CHIEF, DIVISION OF INDIAN HEALTH ON INDIAN HEALTH ACTIVITIES

INTRODUCTION

In 1955, when responsibility for health and medical care for Indians was transferred to the Public Health Service, we received from the Congress directives to bring the level of Indian health into line with that enjoyed by most Americans.

This was—and still is—a large order. Less than 4 years ago, many Indians needing hospital treatment for tuberculosis had to be turned away because there were no beds available for them. Or, in too many cases, crippled Indian children could look forward only to lifetime disability because the specialized services which could mend a broken body were not available for them.

We are making every effort to carry out the intent of Congress with respect to improving the health of the Indians. Progress has been steady since 1955, when half of our hospitals had only one doctor, and that doctor was on call around the clock 7 days a week. All hospitals except several of the smallest now have two or more physicians. Today, no Indian who requires hospital care for tuberculosis needs to wait—we have enough beds for this purpose. Our expanded services for children now include specialized medical care for those with serious disabilities.

But the critical shortage of doctors and nurses, the rundown condition of many Indian hospitals and clinics, the lack of modern medical equipment, the limited understanding of health protection and care on the part of the Indians, and the cultural differences which set the Indians apart constituted obstacles that could not be overcome in only 4 years. The task ahead is still enormous.

THE INDIAN HEALTH PROBLEM

There are 385,000 Indians and Alaska natives who depend mainly upon the Indian health program for all types of health services. The majority of mothers among them now have their babies in our 54 hospitals or in facilities under contract to the Public Health Service. Most of the illnesses and injuries among Indians and Alaska natives of all ages are treated by our medical officers or by our contract physicians. Other services which are vital for the prevention of disease among the Indians—public health nursing, dental care, health education, and environmental sanitation—are provided by our field health staff.

In these Indian and Alaska native populations, health problems are unique and severe. Isolation, both cultural and geographic, still is a major obstacle in reaching these groups with effective medical treatment and preventive health services. Surprising numbers of our beneficiaries speak and think in native languages rather than in English. Many of them have little or no accurate knowledge concerning the causes of diseases and the measures which afford protection. Many of them adhere to an accustomed way of life which is inimical to their health.

Conditions under which tens of thousands of Indians live is little short of primitive. Comprehensive field surveys confirm that use of polluted water hauled from remote sources, insanitary outdoor waste disposal, contamination of food, insect and rodent infestations, and dangerously overcrowded and inadequate housing are common throughout the beneficiary population.

Let me cite a few examples of conditions that are directly related to health with which I am familiar personally. On a large reservation in the Southwest, where more than 4,500 Indians are enrolled, one-fourth of the residents live in wickiups. These are little huts made of saplings, yucca fronds, or other long-leaved plants. No chimneys are provided; the smoke seeps out through the top. More than three-fourths of the residents live in 1- or 2-room dwellings. Only 5 percent of the residents have running water in their homes; 95 percent must haul water distances up to 3 miles. Forty-five percent have no facilities whatever for excreta disposal, and relatively few have satisfactory privies.

In one of our health service areas on the Navajo Reservation where 1,200 Indians live, the average number of rooms per home is less than 2, and the average occupancy is more than 6 persons. 38 percent of the homes in this area have earthen flooring and 63 percent of the homes are more than 2 miles from the nearest water supply. Only one home has water available within 100 feet.

Unfavorable environmental conditions are not limited to the Indians of the Southwest but are general in our beneficiary population regardless of location. Among more than 300 Indians in a North Central settlement, overcrowding in substandard housing is the rule. None of the homes have bathing facilities, and only one has a flush toilet. Residents in more than 17 percent of the homes in this areas are using polluted water for domestic purposes.

Complete solution of these environmental problems affecting health is beyond the scope of the Indian health program. But major progress can be made toward helping the Indians to improve their environment and to reduce greatly their exposure to diseases which now take a heavy toll of life. We would like to do more in the field of sanitation, but at present we lack clear-cut authority. Legislation has been proposed to clarify the authority of the Surgeon General so as to permit greater assistance to Indians in the provision of safe and adequate domestic water supplies and other sanitary facilities on a basis of joint participation with the Indians.

Most of the beneficiaries of the Indian health program are scattered over 250 reservations in 24 States, and in several hundred native villages in Alaska. Transportation is a major problem both for the Indians and Alaska natives in need of health services, and for the health personnel providing these services. Many patients must travel long distances to our treatment facilities on foot, by motor vehicle, and in such animal drawn conveyances as carts, wagons, and dog sleds. Considerable numbers of them then must be transported by airplane or ambulance over great distances to receive the treatment required for their medical condition.

Travel by Indian health staff members to points where they render services is difficult, time consuming, and costly. One of our dentists traveled 10,000 miles last year to various points of service on the Navajo Reservation. Public health nurses cover vast distances over rough, unpaved roads every month. In Alaska, the small airplane is the commonest and most practical mode of travel.

Here are a few facts and figures that point up the severity of the health problems we are coping with among the beneficiaries of the Indian health program. For the purposes of this discussion, the term "Indian" will include also the Eskimos and the Aleuts of Alaska.

First, consider the Indian's average age at death. For Indians this is only 39, against 61 for the population as a whole. Great numbers of Indian babies do not survive the first year of life. Twenty-three percent of all Indian deaths outside Alaska occur among children under 1 year of age, compared with only 7 percent in the general population. These are some of the conditions which are most critical, and for which we have established priorities within the means available.

PROGRESS IN INDIAN HEALTH

We are making definite and measurable progress in our efforts to improve the health of the Indians. The most dramatic gains have been made in bringing down the number of tuberculosis cases and deaths from this cause. Tuberculosis was once the leading cause of death among Indians; today it is in eighth place.

Within 3 years (1955-57) we have reduced new cases of tuberculosis outside Alaska 24 percent. In this same period we have cut the tuberculosis death rate 35 percent. In Alaska, this death rate has been reduced 63 percent since the year prior to the transfer (1954).

Indian deaths from gastroenteric diseases have been cut by more than 25 percent over the past 4 years. However, this group of diseases is still a major cause of the high infant death rate in the beneficiary population.

IMPROVEMENTS IN SERVICES

These advances in the health of the Indians represent the actual saving of many human lives. We achieved these results by expanding and improving the Indian health program sufficiently to enable us to work directly with individual Indian families on their health problems. Our improvement of the program was begun under plans developed in accordance with a survey of Indian health needs which we made in 1956 at the request of the House Appropriations Committee.

When we assumed responsibility for Indian health, the program was seriously undermanned. Let me cite a few examples: There were far too few doctors in either our hospitals or our preventive health activities. The environmental sanitation staff was so small that less than one-third of the Indian beneficiaries were obtaining the benefits of any environmental sanitation activities. There were not enough pharmacists to insure safety in the use of drugs.

The small number of dentists could do no more than provide extremely limited coverage at widely separated locations. Public health nursing services had to be severely limited to areas of most urgent need. There were no health education staff members available for work in the field. There was only a skeleton staff of medical social workers. There were no nutritionists and no specialists in maternal and child health to guide our medical staff in this specialty.

Since there was a critical shortage of staff housing, many key posts for health workers could not be filled. Indeed, the entire physical plant—hospitals and other health installations as well as housing—was in generally bad condition. Some of the buildings actually were unsafe, and there was a great need for additional hospital, clinic, and staff housing construction.

We by no means have overcome all of these deficiencies, but we have made an encouraging start.

In filling the most critical gaps in the Indian health staff, we doubled—and in some cases more than doubled—such categories of personnel as doctors, dentists, sanitary engineers, pharmacists, and medical social workers. We also increased the staff in certain other categories, including public health nurses. Finally, we added new specialties never before available in this program—maternal and child health, nutrition, and community work in health education.

In moving against the most critical deficiencies in the physical facilities, we began a program of extensive modernization that includes some new construction. The staff housing bottleneck was broken—temporarily, at least—by acquisition and erection of more than 300 temporary housing units to tide us over in the emergency. New housing for health personnel is being provided. Construction of new clinics is making it possible for us to move makeshift clinic operations out of trading posts, dirt-floored sheds, and other unsuitable space, and into adequate facilities. Four new hospitals are being developed. I would like to emphasize that the planned improvements in the Indian health program are not complete, and that we still have far to go before we will be in a position to render services that approach those available to the rest of our citizens. But it is improvements such as these, both in staff and in physical assets, that have made possible the reductions in disease and loss of life which have been achieved since 1955.

Four years ago, we knew that in far too many cases the Indian in need of medical attention did not reach the doctor. Or that he reached the doctor too late. We knew that, where the deficit in health resources had been so great and the benefits of modern medicine so little understood, any improvement in health services would create greater demands. We foresaw more intensive use of Indian health facilities by people who never have known adequate medical care or health services.

Accomplishments of the Indian health program during the past year have borne out our predictions. The greatest demands ever encountered are reflected in our program operating statistics. Take hospital admission, for example—the level of 71,000 admissions for 1958 is an all-time record, and is a 7 percent increase over last year. This increase occurred in spite of our dramatic success in reducing illness due to tuberculosis.

Visits for treatment and preventive services provided by hospital clinic staffs increased 22 percent over 1957 to a total of 575,000. Visits to Indian health dental clinics increased by 14 percent, and individual treatments increased by 12 percent over 1957. At the 18 Indian school health centers, visits to physicians increased 25 percent.

I think that most Indians look to the Indian health program for the services which would be rendered by the family doctor, the community hospital, and the local health department. This is a wide range of responsibility. Outside of medical services furnished to uniformed personnel by the Armed Forces, there are no other Federal health programs that are comparable in scope.

The Indian health program operates 54 hospitals for Indians and Alaska natives. Treatment for ambulatory patients and preventive health services are provided at hospital outpatient clinics, health centers, clinics in Indian schools, field health stations, and other locations numbering in the hundreds.

The Public Health Service makes extensive use of non-Federal resources for hospital care and individual treatments and for preventive services. It is our policy to purchase health services for our beneficiaries in localities where suitable health services to meet the health problems of the Indians are in fact available and accessible.

Care is provided at about 300 non-Federal hospitals through contracts or on a reimbursable basis. Approximately 300 private physicians, clinics, and dentists provide treatment for Indian beneficiaries through contractual arrangements with the Public Health Service. Medical care is also provided to beneficiaries through contracts with 4 local and State welfare departments. Contracts are in effect with 22 State or local health departments under which public health services are provided for portions of the beneficiary population.

Since our last budget hearings, I am pleased to report that we have been able to close two small, uneconomical hospitals. In both cases, better hospital care now is being provided under contract in local hospitals. One of these hospital buildings was converted into a modern clinic and health center, from which services not previously available are being provided.

NEEDS OF THE INDIAN HEALTH PROGRAM

The services of the Indian health program, whether provided directly or by contract, are thinly spread among the beneficiary population groups. Even with the present patient load, our Indian hospitals are undermanned. We are short of doctors qualified in pediatrics; obstetrics; gynecology; eye, ear, nose, and throat; orthopedics; internal medicine; and surgery. We have difficulty in filling nursing positions, particularly at isolated locations.

Most of our hospital patients do not have the benefit of meals planned and prepared under the supervision of qualified dietetic personnel. Efficiency of some of the hospitals and other health facilities is impaired because of shortages of pharmacy and medical records personnel. Only 12 of the 54 hospitals in the program have met the standards required for approval by the Joint Committee on Accreditation of Hospitals.

Many Indian communities are without any public health nursing services and many others receive these services on an emergency basis only. The ratio of public health nurses to beneficiaries in the Indian health program is still far below that which is considered acceptable. Medical social services are available only in the most urgent cases at a few major installations.

Environmental sanitation services reach only about 65 percent of the beneficiary population. These activities are geared primarily to develop among Indians an awareness of the importance of good sanitary practices and to promote safe water supplies, sanitary waste disposal, insect and rodent control, and safe food handling practices. While measurable improvements are being made in the environment and numerous self-help projects within the economic means of the Indians have been promoted, the great continuing need for adequate water supplies and other sanitary facilities remains as one of our biggest problems.

Dental services now can be provided for only one-fifth of the beneficiary population. These services are limited primarily to school age children and to adults in need of emergency treatment. Health education services by community workers qualified in this specialty now are available on only a few reservations.

These are some of the shortcomings in the Indian health program which we must correct in order to meet our basic obligations to the Indian people. We have accepted the obligation of raising the health standards of our Indian beneficiaries to a level which compares favorably with that enjoyed by most Americans. To achieve this goal, we must continue the planned development of the Indian health program. We must gear this program to the known health needs of the Indians, and we must prepare to face increasing demands that are based on these needs.

With Indian deaths from such preventable diseases as tuberculosis, gastroenteritis, influenza, and pneumonia three to nine times higher than in the population as a whole, the urgency for attacking the backlog of unmet health needs in this population is clear. Improvements which we are planning for 1960 are modest in scope. However, they are based on our highest priorities, and we are confident that they will produce measurable benefits in the shortest time.

With the additional funds requested, we plan to add a few more physicians where the need is greatest, and more nurses to handle the rising workload in our hospitals. The quality of hospital services will be improved. Health services for schoolchildren will be increased. Additional services will be provided for disease prevention, with the aim of further cutting down excessive illness and death rates attributable to infections.

This effort requires that we rapidly extend health education services provided in the field by community workers to at least half of the major reservations. It requires that public health nursing services be extended in areas and communities where no health staff members now are available to provide any basic guidance in health for the beneficiaries. It requires extension of our use of trained Indian sanitarian aids under professional supervision so that sanitation activities can be made more effective throughout the program.

I have made reference to the rehabilitation of our physical plant, including construction of some new health facilities and staff housing. Since construction is covered by a separate appropriation, construction activities are described in a separate statement. However, I would like to point out that 15 new clinics either are completed or under construction, and a portion of the increase which we are requesting is needed to staff and operate these facilities.

For financing Indian health activities, we are requesting \$43.5 million. An increase of \$1,363,000 or about 3 percent over 1959, this will provide a net increase of \$847,500 for hospital operations and \$515,500 for field health activities. With this appropriation we will be able to remedy some of the deficiencies which are delaying further improvement in the health of the Indians. The President's budget does not reflect the 1959 supplemental request of \$202,000 for wage board increases occurring in 1959 nor does it provide for the full years' cost of \$290,000 for the 1959 wage board increases.

PROGRESS SINCE 1955

Dr. SHAW. Mr. Chairman and members of the committee, in 1955, when responsibility for health and medical care for Indians was transferred to the Public Health Service, we received from the Congress directives to bring the level of Indian health into line with that enjoyed by most Americans.

Progress has been steady since 1955, when half of our hospitals had only one doctor. Prior to that year many tuberculous Indians in need of hospital treatment could not be admitted because beds for them were not available. And in far too many cases rehabilitation was not available for crippled Indian children.

Today, all Indian hospitals except several of the smallest have two or more doctors. No Indian who requires hospital care for tuberculosis has to wait; sufficient beds are available. Expanded services for children now include specialized medical care for those with serious disabilities. These are some of the improvements which have been made in health services for our Indian beneficiaries.

But the critical shortage of health personnel, the unsatisfactory general condition of the physical plant, the lack of modern medical equipment, and the cultural differences which tend to set the Indians apart are obstacles which could not be overcome in only 4 years. The task ahead is still enormous.

PROBLEMS IN INDIAN POPULATION

There are 385,000 Indians and Alaska natives who depend mainly upon the Indian health program for all types of health services. Among them, health problems are unique and severe. Isolation, language barriers, and limited understanding of health matters pose major problems for the Indian health program.

Use of polluted water hauled from distant sources, insanitary waste disposal, contamination of food, insect and rodent infestations, and overcrowded and inadequate housing are common throughout the beneficiary population.

Complete solution to these problems is beyond the scope of the Indian health program. But major progress can be made in helping the Indians to improve their environment and reduce exposure to diseases which now take a heavy toll.

The most dramatic gains we have made in improving Indian health are in controlling tuberculosis. Once the leading cause of death among Indians, it is in eighth place today.

Between 1955 and 1957 we have reduced new cases of tuberculosis outside Alaska 24 percent, and cut the tuberculosis death rate 35 percent.

In Alaska, this death rate has been reduced by 63 percent since the year prior to the transfer—1954.

Indian deaths from gastroenteric diseases have been cut by more than 25 percent over the past 3 years. However, this group of diseases is still a major cause of the high infant death rate among Indians.

These health advances, representing actual saving of many human lives, were achieved by expanding and improving Indian health services. Program improvements affect every activity, and range from doubling some categories of health personnel to adding health services never before available. We now are experiencing the heaviest demands ever encountered for Indian health services.

AMOUNTS REQUESTED

For financing Indian health activities, we are requesting \$43.5 million, an increase of \$1,363,000 or about 3 percent over 1959. This will provide a net increase of \$847,500 for hospital operations and \$515,500 for field health activities.

With this appropriation, we will be able to remedy some of the deficiencies which are delaying further improvement in the health of the Indians.

The President's budget does not reflect the 1959 supplemental request of \$202,000 for wage board increases occurring in 1959 nor does it provide for a full year's cost in 1960 of \$290,000 for the 1959 wage board increases.

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$2 million for Indian health activities.

As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Ap-

propriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

This will permit the Public Health Service to provide additional hospital and health services to our Indian beneficiaries by broadening and intensifying the attack on their serious health deficiencies.

Of the \$2 million, \$1,290,000 will be expended in the hospitals to provide 189 additional professional medical personnel, supporting staff, and related costs. Funds of \$710,000 will be expended in the field health centers, clinics, and field health station activities to provide 96 additional professional medical and dental personnel, supporting staff, and related costs.

I will be glad to answer any questions, Mr. Chairman.

HOUSE ALLOWANCE

Senator HILL. Doctor, you support the efforts of the House in increasing this budget by \$2 million where you have 189 additional personnel for your hospitals; is that right?

Dr. SHAW. Yes, sir; in addition to what was in the budget.

Senator HILL. Doctor, you support the efforts of the House in the average staffing of hospitals in this country, do you need this 189 additional personnel?

Dr. SHAW. Yes, sir.

Senator HILL. You do. In other words, if you had the 189 additional personnel, you still would not be above the average in this country?

Dr. SHAW. We would not be up to the average.

Senator HILL. In other words, even with this additional 189 personnel, you would still be under the average personnel in the average hospital in the United States today; is that right?

Dr. SHAW. Yes, sir.

Senator HILL. As to the other 96 personnel for your other clinic services, would that bring your field health centers and clinics and field health station activities up to what we might term "the average"?

FIELD HEALTH CENTERS

Dr. SHAW. We have in being this year a number of field health centers and health stations as a result of our construction program in areas which previously have been operated on a very limited basis with minimum personnel and with very inadequate facilities.

This will permit us to staff these facilities and to improve the staff in some of the existing facilities. Within this activity we operate 19 field health centers, 175 health stations, and at many other smaller locations on a part-time basis.

Senator HILL. Could you give us offhand, and, if not, you could supply it for the record, how much additional funds you would have to have to bring your hospitals and your clinics and health centers up to the average staffing in the United States?

SURVEY OF HEALTH NEEDS

Dr. SHAW. The comprehensive health survey directed by Congress and reported 2 years ago established the base for this program as between \$60 million and \$65 million per annum to correct the de-

ficiencies in Indian health and to get us into a position to handle the need for services. After meeting the major health deficiencies, the needs would begin to decrease over the long period.

Senator HILL. That figure of \$60 million or \$65 million would be in relation to the amount now in the bill put in by the House, of \$45,500,000; is that right?

Dr. SHAW. Yes, sir.

Senator HILL. Are there any questions?

NURSES' TRAINING FOR INDIAN GIRLS

Senator MONRONEY. Is there a continuing program of nurses' training for Indian girls?

Dr. SHAW. Yes, sir. We operate two practical nurse training schools, one in Albuquerque and one in Mount Edgecumbe, Alaska.

Senator MONRONEY. Did you not operate a training school in Oklahoma for awhile, an Indian training school?

Dr. SHAW. Yes, sir. We operated that for 1 year and transferred it to Albuquerque, where we had better teaching facilities and a more adequate base of clinical material, so that we could get approval by the national approval body.

Senator MONRONEY. There was no diminution of the number you could train because of that removal?

Dr. SHAW. No, sir. There was an actual doubling of the class. Last year we trained 130 practical nurses.

CONTRACT MEDICAL SERVICES TO SMALL GROUPS

Senator MONRONEY. Let me ask you this: Where you have small groups of Indians, such as in Oklahoma, or in any State where several tribes live in isolated areas and have not yet acquired full citizenship, do you have the right to supply medical services by contract when an Indian health center or a Government installation is not feasible?

Dr. SHAW. Yes, sir. We have many contracts and we prefer to make contracts where the services can be provided of the kind and the intensity required to meet the problems.

We have over 300 contracts with local hospitals, local physicians and dentists, and with State health departments, county health departments, and city health departments for such purposes.

Senator MONRONEY. I do not want to burden the record unnecessarily but I wonder if you could list the areas in which you have contract facilities in Oklahoma in addition to your regular Government facilities?

Dr. SHAW. I would be very happy to supply that information for the record.

(The information referred to follows:)

HOSPITAL CONTRACTS IN OKLAHOMA

<i>Name</i>	<i>Address</i>	<i>Name</i>	<i>Address</i>
Baptist.....	Muskogee.	Memorial.....	Ardmore.
Community.....	Elk City.	Muskogee General.....	Muskogee.
Cimarron County.....	Boise City.	Pushmataha.....	Antlers.
Hillcrest Medical Center..	Tulsa.	St. John's.....	Tulsa.
Kingfisher Community---	Kingfisher.	Wewoka Memorial.....	Wewoka.
McCurtain County.....	Idabel.		

CONTRACT PHYSICIANS IN OKLAHOMA

<i>Name</i>	<i>Location</i>	<i>Name</i>	<i>Location</i>
W. H. Atkins-----	Shawnee.	Miami Clinic-----	Miami.
Frank H. Austin-----	Lawton.	John B. Miles-----	Anadarko.
Aycock & Dennis-----	Do.	G. L. Lythcott-----	Oklahoma City.
H. R. Bender-----	Do.	H.A. Masters-----	Tahlequah.
Bert T. Brundage-----	Thomas.	R. K. McIntosh-----	Do.
G. W. Buffington-----	Tahlequah.	T. C. Points-----	Shawnee.
J. H. Bushart-----	Lawton.	J. R. Rafter-----	Muskogee.
A. J. Caldwell-----	Do.	R. L. Shore-----	Lawton.
J. M. Campbell-----	Oklahoma City.	D. F. Stough-----	Geary.
J. C. Dague-----	Tulsa.	M. J. Sugarman-----	Elk City.
H. F. Flanigan-----	Do.	L. F. Thornton-----	Lawton.
Joseph Fulcher-----	Do.	D. E. Wilson-----	Do.
C. D. Fullenwider-----	Muskogee.	Williams-Godfrey-	
C. E. Green-----	Lawton.	Henley Clinic-----	Okeene.
C. M. Harvey-----	Oklahoma City.	J. C. Young-----	Lawton.
P. E. Hewitt-----	Muskogee.	Wewoka Medical So-	
Hicks & Lewis-----	Lawton.	cietty-----	Wewoka.
M. R. Jennings-----	Claremore.	Stroud General Hos-	
Port Johnson-----	Muskogee.	pital Clinic-----	Stroud.
Vance Lucas-----	Tulsa.	M. White & Associates-	Oklahoma.
John M. Carey-----	Oklahoma City.	M. L. Whitney-----	Okemah.
Nelson Hamilton-----	Lawton.	Austin Haddox-----	Antlers.
B. G. Henley-----	Do.	A. H. Krause-----	Muskogee.
McAlester Clinic-----	McAlester.		

CONTRACT DENTISTS IN OKLAHOMA

<i>Name</i>	<i>Location</i>	<i>Name</i>	<i>Location</i>
S. M. Barrett-----	Watonga.	E. T. Pollock-----	Seneca.
B. J. Campbell-----	Ardmore.	R. S. Smith-----	McAlester.
A. C. Caywood-----	Do.	J. M. Worwag-----	Ponca City.
T. O. Garrett-----	Checotah.	J. S. Trawick-----	Carnegie.
P. E. Greenan-----	El Reno.	F. W. Cabbage-----	El Reno.
T. L. Hefley-----	Elk City.	H. H. Holliday-----	Anadarko.
P. K. Kincaid-----	Lawrence.	C. M. Atkinson-----	Okemah.
C. H. Lebew-----	Pawnee.	T. L. Witherspoon----	Antlers.
J. D. Marlar-----	Claremore.		

MISCELLANEOUS CONTRACTS IN OKLAHOMA

1. Tulsa X-Ray and Pathology Laboratory, Tulsa.
2. Mrs. L. F. Reese (Anesthetist), Claremore.
3. Ruby McCauley (Laboratory), Oklahoma City.
4. Oklahoma State Department of Health (Public Health Services).

HEALTH SERVICES FOR SMALL TRIBAL GROUPS

Senator MONRONEY. I have had complaints in the past, but not recently, about the deficiency of Indian health service for small tribal units. Perhaps this deficiency has been rectified, but I would like to check on the problem from your list of Oklahoma contracts.

Dr. SHAW. We, of course, are happy to furnish that and I might say there has been a very fine working relationship between our area office and the State health department where they have joint staff meetings that are scheduled on a frequent basis.

So most all of our problems have been ironed out, and if not, they are planning jointly on them.

Senator MONRONEY. Thank you very much.

DOMESTIC WATER SUPPLY

Senator HILL. Dr. Shaw, let me ask you this: You spoke about the domestic water supply. Do you have any jurisdiction over this water supply?

Dr. SHAW. Yes and no. Public Law 568 transferred this authority from the Bureau of Indian Affairs, Department of Interior, to the Department of Health, Education, and Welfare under the Public Health Service and left some question as to the authority for water supply, sewage disposal systems and the like. So that the authority is in question and neither is it broad enough to provide for an adequate program to attack the problem in a lasting, helpful, and beneficial way.

Our water supply, sewage disposal, waste disposal of all types, rodent control, of course, tie very close to our Indian health problem. Since tuberculosis has yielded so dramatically, it now, in my opinion, constitutes the No. 1 problem.

The No. 1 problem involves those diseases having to do with sanitation. Twenty-three percent—and this has come down about 5 percent in the last several years—23 percent of all the deaths occur in the first year of life, and the great majority of these infant deaths occur between the 1st and 11th month of the 1st year of life.

EMPOWERING LEGISLATION NEEDED

In other words, when the babies leave the hospital and go to their home environment, 1 out of 10 deaths, in one town, for instance, are due to diseases directly traceable to poor sanitation; so we need authority, and a base for an adequate sanitation program as reflected in S. 36, recently acted upon favorably by the Senate committee.

Senator HILL. The unique authority that the Senate passed in the last session but was not acted on by the House in which the Senate committee reported favorably on Thursday of last week, but which has not yet been acted on by the Senate, is that not right?

Dr. SHAW. That is right. That will give us the authority required to adequately plan and execute a program, to negotiate with Indian tribes, communities and States, and accept contributions and work jointly with the Indians on their sanitation problems.

A good example, Senator Bible, I think, is the facility at Elko, Nev.

Senator BIBLE. Yes, it has developed very well.

Dr. SHAW. That is one project where with special legislation for that purpose, it was shown what can be done very cheaply in this area.

Senator HILL. You now need this general legislation?

Dr. SHAW. Yes, sir.

HEALTH CONDITIONS IN JAILS

Senator HILL. Do you have any jurisdiction over the health conditions in the jails where the Indians are incarcerated?

Dr. SHAW. Only in an advisory capacity. Law and order is the responsibility of the Bureau of Indian Affairs or the individual tribal governing bodies. We have a memorandum of understanding with the Bureau of Indian Affairs in which our sanitary engineers and sanitarians inspect such facilities, render reports, and make recommenda-

tions and do the necessary supervisory followup; but we are in the program only as health advisors, not with direct authority.

Senator HILL. You have no authority at all, and you only advise, having no authority to correct any conditions?

Dr. SHAW. We have no authority to correct or implement our recommendations.

ELIGIBILITY OF INDIANS FOR SERVICES

Senator HILL. Doctor, it has come to my attention that some Indians are complaining that they have applied for health services and have been denied these services on the grounds that they were not eligible for such services. I do not understand this. I thought we were providing funds in order that you would give medical services to Indians that would permit us to bring up their health standards to that of the rest of the population. Would you explain to me why we are receiving complaints on this matter?

Dr. SHAW. Yes, Senator Hill, this is a very difficult and involved problem. As you know, when the Congress transferred this program to the Public Health Service in 1955 it gave us the responsibility for the conservation of the health of the Indians. However, the law contained no definition of the term "Indians" nor any provisions as to what individuals are within the scope of the program. The law did, however, authorize us to issue regulations to carry out the provisions of the act. Under these regulations services are available to Indians belonging to the Indian communities served by the Indian health program.

Senator HILL. I am not sure just what you mean, Doctor, when you say services available to the Indian community. Does this distinguish that some Indians are eligible for services and others are not eligible for services?

Dr. SHAW. I believe, Mr. Chairman, that it is obvious that all Indians could not be eligible for Indian health services simply on the basis of their degree of Indian blood.

This is especially true since there are Indians that have become integrated members of established communities throughout the United States and where no Indian health facilities exist, nor is there any program being carried out for the benefit of Indians. This could include all of the large cities in the United States, for example, such as New York where there have been no provision of Federal services to Indians for many, many generations. Our starting point was the continuation—but with improvement and intensification—of services to the same groups of Indians that were being provided with health services by the Bureau of Indian Affairs of the Department of the Interior at the time the program was transferred to us.

Our facilities are primarily located, and the bulk of the Indian health program is primarily related to Indians on reservations. However, we recognize that the Indian health problem does not stop with the boundaries of the reservation but that significant Indian health problems exist in and around Indian reservations. On the one hand, we are desirous of raising the health level of our Indian citizens to the level enjoyed by the rest of our population. On the other, we wish to assist in the transition from special Federal services for Indians to the full use of normal, private, community and State health

resources. With this in mind we do provide health services to Indians in areas other than on reservations, primarily those in and around reservations in order to overcome serious health problems that exist in such communities.

We do not wish to act in such a way as to force these Indians to return to the reservation in order to obtain Federal health services. However, with respect to those Indians that reside in established communities where adequate private and public health services exist, and where the Indians can avail themselves of these services to the same extent as their non-Indian neighbors, our policy is not to provide Federal health services.

ELIGIBILITY REGULATIONS

Senator HILL. Dr. Shaw, would you place in the record at this point your regulations governing eligibility of Indians that you referred to a few moments ago.

Dr. SHAW. Yes, Mr. Chairman, I will be glad to.

(The information requested follows:)

36.12. *Persons to whom services will be provided*—(a) *In general.* (1) Services will be made available, as medically indicated, to persons of Indian descent belonging to the Indian community served by the local facilities and program, and non-Indian wives of such persons.

Senator HILL. Just who makes the determination as to which individuals will receive services and what are the criteria for making this determination?

Dr. SHAW. Under our regulations we have decentralized this authority to the medical officers in charge of our individual facilities under the general supervision of the area offices. They make the determination as to individual eligibility. Generally they continue the local practices which were in effect before the transfer and take into consideration such things as the degree of Indian blood, place of residence, tribal enrollments and availability of other local resources. We are not satisfied, however, that this continuation of local practice is the best policy for the future. We have been carrying on discussions with the Department of Interior in order that we might appropriately coordinate the program of providing health services to Indians with the overall program of Federal responsibility with respect to Indians.

It is our policy to plan jointly with the Indian groups, State and local agencies, in order to make sure that all of the necessary health services are available to Indians without gaps or duplication, and in order that a cooperatively planned and orderly program of transition from a separate Federal responsibility to integration of the Indians into State and local communities can be ultimately achieved.

CONSTRUCTION OF INDIAN HEALTH FACILITIES

APPROPRIATION ESTIMATE

"For construction, major repair, improvement, and equipment of health and related auxiliary facilities, including quarters for personnel; preparation of plans, specifications, and drawings; acquisition of sites; purchase and erection of portable buildings; and purchase of trailers; [\$4,124,000, of which \$1,750,000 shall be available for the purposes of Public Law 151, 85th Congress] \$3,087,000, to remain available until [June 30, 1960] *expended: Provided, That such expenditures may be made through the Department of the Interior at the option of the Secretary of the Department of Health, Education, and Welfare: Provided*

further, That the unexpended balance of appropriations heretofore granted under this head shall be merged with this appropriation."

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$4, 124, 000	\$3, 087, 000	\$4, 587, 000
Proposed supplemental.....	1, 886, 000		
Unobligated balance brought forward.....	10, 127, 303	2, 051, 503	2, 051, 503
Unobligated balance carried forward.....	-2, 051, 503	-128, 303	-128, 303
Total obligations.....	14, 085, 800	5, 010, 200	6, 510, 200

Obligations by activities

Description	1959 estimate	1960 estimate	House allowance
1. Hospitals and clinics.....	\$9, 228, 308	\$2, 585, 207	\$2, 585, 207
2. Personnel quarters.....	817, 322	1, 000, 000	2, 500, 000
3. Alterations.....	2, 952, 041	600, 218	600, 218
4. Other plant facilities.....	162, 904		
5 Community hospitals serving Indians and non-Indians.....	925, 225	824, 775	824, 775
Total obligations.....	14, 085, 800	5, 010, 200	6, 510, 200

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
PUBLIC HEALTH SERVICE			
Average number of all employees.....	17	17	17
Number of employees at end of year.....	10	10	10
01 Personal services: Positions other than permanent.....	\$86, 780	\$86, 780	\$86, 780
02 Travel.....	4, 200	5, 000	5, 000
03 Transportation of things.....	20, 700	20, 000	20, 000
05 Rents and utility services.....	200	1, 000	1, 000
07 Other contractual services.....	100, 000	227, 100	227, 100
08 Supplies and materials.....	108, 795	99, 945	99, 945
09 Equipment.....	75, 000	631, 500	776, 500
11 Grants, subsidies, and contributions.....	925, 225	824, 775	824, 775
15 Taxes and assessments.....	1, 900	1, 900	1, 900
Total, Public Health Service.....	1, 322, 800	1, 898, 000	2, 043, 000
ALLOCATION TO DEPARTMENT OF THE INTERIOR			
Average number of all employees.....	16	6	6
Number of employees at end of year.....	20	7	7
01 Personal services: Positions other than permanent.....	\$141, 500	\$60, 000	\$60, 000
02 Travel.....	29, 400	12, 000	12, 000
07 Other contractual services.....	174, 100	127, 700	127, 700
08 Supplies and materials.....	9, 000	7, 000	7, 000
10 Lands and structures.....	12, 400, 000	2, 901, 600	4, 256, 600
11 Grants, subsidies, and contributions.....	9, 000	3, 900	3, 900
Total, Department of the Interior.....	12, 763, 000	3, 112, 200	4, 467, 200
Total obligations.....	14, 085, 800	5, 010, 200	6, 510, 200

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$1,500,000 for construction of Indian health facilities. As the Secretary indicated this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

The increase of \$1,500,000 would supplement funds requested for personnel quarters and would provide an additional 52 housing units with adequate furnishings for occupancy by our professional health staff in locations now woefully short of housing or would provide replacements for units now occupied which are unfit for occupancy. The increase would reduce the total need developed, in a recent survey, for 1,592 public and rental personnel quarters units in need of repair, replacement, or additional new construction. Of the total need, 132 quarters units are required under Public Law 85-241, as amended, to be repaired, replaced, or constructed to fulfill program needs for adequate public quarters prior to July 1, 1961 (71 Stat. 557 and 72 Stat. 664).

HOUSING FOR PERSONNEL

Senator HILL. Dr. Burney, in his very informative statement this morning, spoke about the improvements in the housing for your personnel. Is there anything you would like to add to that?

Dr. SHAW. Yes, sir. We have made some slight improvement in the level and quality of our housing of personnel.

We have, as a result of a recent survey which brought our figures up to date, a demonstrated need for nearly 1,600 housing units. There are 335 which can be repaired, 778 need replacement, and 479 new additional units are required. We find ourselves in a very critical situation at this time because at the time of the transfer the low level of professional health staffing and the number of facilities, quarters, occupied by health personnel at the time of the transfer, to say nothing of the deplorable condition of the majority of the units which were transferred.

In order to operate the program we had to move in about 328 temporary housing units just to stay in business. Since then we have added somewhat over 100 units in accordance with the funds provided by the Congress.

DEVOTED SERVICE OF MEDICAL OFFICERS

Dr. BURNEY. I would like to make one comment as to that. Dr. Lowry and I visited several of these small hospitals in the area about a year ago in the Southwest, and we were impressed with two things: One was the devoted interest and concern of these young medical and nursing officers and the pharmacists also with the job that could be done in those areas.

We were also impressed with the ability of the wives, these young wives, to adjust to these isolated conditions and to this very poor housing.

HOUSING SITUATION

One evening we visited one of these Picket houses and we had to wade through water because they did not have proper drainage. This was a little shack. These Picket houses are nothing but shacks and this man happened to be a pharmacist whose son had been kicked by a wild horse coming down from the mountain. There was no fence around his yard. We are asking these people to move out into these extremely isolated areas without some of the advantages or disadvantages of a permanent area, and I think we have some obligation to provide them with decent housing where the husband and wife and children can at least live in a fairly decent way with a fairly decent living standard.

HOUSE ALLOWANCE FOR HOUSING

Senator HILL. I note, Doctor, that the House allowed you \$1,500,000 over the budget estimate. As stated in the report, one of the very important factors is good morale for the personnel charged with field activities as concerns the Indian health program, and by my personal observation of repeated testimony on this subject, that is very obvious.

It has been testified in connection with the budget of 1960 that the budget estimate on the funds for personnel housing would not even allow the Indians to break even.

In other words, at the end of 1960 the need would be greater even than the need is now. The committee has added, therefore \$1,500,000 specifically for this type of construction. There is no question but that from your testimony you need this additional \$1,500,000?

Dr. SHAW. That is correct.

Dr. LOWRY. I think these are some important words, from my personal observation. I think that neither Dr. Burney nor I can appreciate the actual conditions under which we are asking these professional people to live and work.

Dr. Burney said that we were amazed and wonderfully pleased with the attitude of the wives. We have found that if we can keep the wife happy, the officer loves his work and will stay there. But these people can only put up with these conditions so long and we have to do something about them.

Senator HILL. With this \$1,500,000, do you think you can do much?

Dr. LOWRY. It will allow us to improve conditions in terms of certain quarters but, as Dr. Shaw pointed out, we still have a long way to go.

Dr. SHAW. There is a personal observation in the House report by Congressman Marshall from Minnesota who visited these sites.

Senator HILL. He visited and saw it firsthand, this housing?

Dr. SHAW. Yes, sir.

USE OF CAPEHART HOUSING

Senator MONRONEY. Could I ask if you ever explored the possibility of extending the Capehart housing program, which is available to the armed services and in some cases to the Atomic Energy Commission, to the employees of the Indian health programs? This would not require large capital sums, but these houses would be paid out over a 30-year period, on a rental basis, and then become the property of the Government?

Dr. SHAW. We have not, to my knowledge.

Mr. KELLY. I would question just offhand as to whether or not you would interest many investors because of the very small isolated areas in which we operate and the very small number of houses. It would almost be an impossibility from the point of the investor being present for any management responsibilities in connection with that small area.

Senator HILL. Are there any other questions on that point? That was a good question, Senator Monroney.

EFFECT OF SANITATION WORK

Senator BIBLE. Mr. Chairman, I have only one question and you opened up the subject and I want to add this to the record: that

through your fine sponsorship we did avoid what could have been a disastrous epidemic to the Government only last year. I am gratified that this authorizing language is moving you forward, and I hope it is enacted into law because I recognize your division had some questions as to the legal authority to get into the field of sanitation in our State, which is a pathetic problem in every one of our Indian colonies, and my question is simply this:

Are you prepared, assuming this authorizing language becomes law, to make the necessary appropriation requests for implementing funds to clean up some of these very, very pathetic situations in the field of sanitation?

Dr. SHAW. If we are given the basic authority, we will proceed, within the budget process, to request the necessary funds.

QUESTION OF IMMEDIATE COMPLIANCE WITH S. 36

Senator BIBLE. And it is reasonable to assume that will be done within this session of the Congress?

I do not know what day we will adjourn, but the chairman can speak to that, whether it will be July or August; we have the same critical problem with a number of our Indian colonies in Nevada this year that we had with the Elko Indian colony last year.

So it is a question of some distressing urgency. You say you are prepared to act within the budgetary processes. Are we talking there about the next 3 months or the next year or when? And I am going to assume this law is enacted so that you have the authority.

Mr. KELLY. I think all we can say on this is that it was agreed that if this legislation were enacted that the funds would not be appropriated in sums of \$5 million or \$10 million a year without a specific project plan, but rather it would be on a specific project-by-project basis, the same as we do with construction for our own projects. We would submit the details of the need, the plan to correct these needs, but I would not wish to speculate as to whether or not there is any possibility of such a proposal being submitted to this session of Congress.

Senator BIBLE. Well, how do I take care of two other distressing problems I have in Nevada that can be just as distressing in July and August of this year as it was in Elko last year in July or August?

Mr. KELLY. I would not wish to suggest how.

Senator BIBLE. In other words, I take your answer to mean you are not going to support the authorizing language this year?

Mr. KELLY. I do not mean that at all. The point was that I think it is impossible for us to give you any commitment as to whether or not a proposal will reach the Congress this year to implement that legislation. We do not know. We have to go through the budgetary process of developing a plan, having it reviewed as to merit, and then a determination as to whether or not the fiscal resources and fiscal policies will permit its being forwarded to the Congress; so it would be purely speculation on our part as to whether or not it could be accomplished in this session.

ATTITUDE OF DIVISION ON SANITATION NEEDS

Senator BIBLE. May I put it this way: I am not going to belabor the point, but I assume that Dr. Shaw's interest in this field having been very helpful last year—and naturally there are some questions upon which we do not agree, but nevertheless we got the job done and that is the main thing. But now I understand you are sympathetic, Dr. Shaw, to cleaning up these terrible sanitary problems within the Indian colonies; is that correct?

Dr. SHAW. Not only sympathetic, but insistent.

Senator BIBLE. The word "insistent" was the word I was looking for from Mr. Kelly because the word "insistent" leads me to feel that also had a sense of urgency; is that correct?

Dr. SHAW. Yes, sir.

Senator BIBLE. If it is a bad problem, it is going to be a bad problem next year, is it not?

Dr. SHAW. Yes.

Senator HILL. I think I might make a suggestion to the Senator on this matter at a later date. Congress, under the Constitution, does not have to wait for a budget estimate, I am happy to say.

Are there any other questions, Senator?

Senator BIBLE. I have no further questions.

COMMENDATION OF SERVICE

Senator HILL. I want to say this, that I have been on this committee ever since the Indian health activity has been under the Public Health Service. I think I know something of what the conditions were at the time the Public Health Service took over these activities and I think, with the funds that Congress has given you, you have done a fine job for the Indians. There has been great improvement, certainly, in their health care and their health facilities, and, Dr. Burney, I know I express the sentiments of all the members of this committee in thanking you and in expressing our appreciation to you and all the members of your staff who have testified here today and who have been so helpful to the committee.

CONSTRUCTION OF INDIAN HEALTH FACILITIES

Dr. SHAW. Senator, may I say one word. I still have a budget for "Construction of Indian health facilities" that I would like to submit the statement of for the record.

I think we have answered any questions that are involved.

Senator HILL. All right; we will put your statement in full in the record.

(The statement referred to follows:)

STATEMENT OF CHIEF, DIVISION OF INDIAN HEALTH ON CONSTRUCTION OF INDIAN HEALTH FACILITIES

Until the Indian health program develops adequate hospital and clinic facilities, it will not be possible to provide medical treatment and health services which can meet the extensive needs of the beneficiaries of this program. Until suitable staff quarters can be made available, it will not be possible to recruit and retain the health personnel urgently needed to carry out fully the obligations of the Public Health Service to the Indian people.

The Public Health Service has given high priority to the expansion and improvement of the facilities of the Indian health program since the transfer of this program in 1955. Progress since then has been continuous.

In 1955, the physical plant generally was in deplorable condition. Many of the 56 hospitals transferred to the Public Health Service were obsolete, poorly equipped, and rundown. Some were hazardous as fire traps. Several were structurally unsound. Many of the other health facilities, including health centers, clinics, and field health stations, were known to be unsuited for their purposes and in serious need of repair or replacement. Much of the staff housing had deteriorated beyond economical repair. Despite our progress, some such conditions still exist.

Apart from the unsatisfactory condition of existing facilities and housing was their complete lack at a number of critical locations. It was not uncommon for medical officers to improvise and hold clinics in such unsuitable quarters as trading posts, schools, and even dirt-floored sheds. In some cases, this is still being done. There were cases in which physicians were commuting up to 60 miles over poor roads to reach their duty stations. Some key assignments could not be filled because of the lack of staff housing, and this is true to a lesser extent now.

One of the first steps taken to correct these conditions was a survey of the entire physical plant, and the establishment of priorities for overcoming the most serious deficiencies. On the basis of this survey of most pressing needs in our physical plant, and with funds provided specifically for the purpose, a comprehensive program of expansion and modernization of facilities was launched.

PROJECTS COMPLETED AND UNDER CONSTRUCTION

As a result of this construction program, 13 health centers and clinics on the Navajo Reservation and in South Dakota have been completed. The 7 completed for the Navajos include the large health centers at Kayenta, Ariz., and Tohatchi, N. Mex. The six completed in South Dakota include clinics at Allen, Kyle, Manderson, Wamblee, Red Scaffold, and Bull Head. Others under construction and to be completed within 2 months include one for the Navajos and one for the Papagos in Arizona. The new 75-bed hospital at Shiprock, N. Mex., is under construction and should be completed during December 1959.

Alterations have been completed or are being carried out at a total of 33 locations. These include such projects as installing new heating plants, rewiring, remodeling kitchens, and providing additional outpatient clinic space. We have also completed or are in the process of making improvements in 16 plant facilities.

Of 71 new permanent housing units for which funds are available, all are completed or under construction. The completed units include 2 in Alaska, 21 in Arizona, 6 in Montana, 2 in Nevada, 9 in New Mexico, 2 in North Dakota, and 2 in South Dakota.

STATUS OF PLANS AND BIDS

A construction contract for the 50-bed hospital at Kotzebue, Alaska, was awarded on January 30, 1959, and the estimated time of completion of the project is December 1960. A construction contract award for the 200-bed medical center at Gallup, N. Mex., was authorized on April 27, 1959, and the anticipated completion date is November 1960. Working drawings and specifications for the 50-bed hospital to be built at Sells, Ariz., have been completed and bids will be opened in June 1959. In order to complete this hospital, a supplemental appropriation for 1959 funds is being requested.

Working drawings for modernizing the hospitals at Rosebud and Pine Ridge, S. Dak.; Browning, Mont.; and Whiteriver, Ariz., are nearing completion. Construction contract awards are anticipated during this fiscal year.

NEW CONSTRUCTION PLANNED

The 29-year old hospital at San Carlos, Ariz., is obsolete and completely inadequate for the needs of the 4,500 Indians which it serves. Since modernization of this facility would cost approximately the same as a new hospital without resulting in a completely adequate facility, we are requesting funds for planning new construction. The facility which we are proposing would contain nearly three times as much space, and would provide for an outpatient department and a field health unit for increased preventive health services needed at this locality.

Last year, it was our intention to remodel the hospital at Keams Canyon, Ariz., to render it adequate for the needs of the Hopi Indians. Funds were provided for this purpose. However, careful investigation of this possibility by private architectural-engineering contractors has established that remodeling the old building is not feasible. To meet the need for a suitable hospital at this location, the only practicable course is to build a new one. This can be done with the funds available. We plan to build on the present site, connecting to existing utilities in the interests of economy.

Even with the new construction, adequate housing for Indian health staff members and their families remains one of the greatest needs of the Indian health program. Existing housing is deficient in quantity, and much of it is unacceptable in quality. Many of the housing units transferred to the Public Health Service do not meet the basic standards prescribed by the Bureau of the Budget for housing provided by the Federal Government. Many still in use are shacks more than 40 years old which are seriously deficient in sanitation requirements, wiring, heating, and sewage disposal.

We are requesting funds for construction of 36 new housing units in 1960. These, together with the 71 programed units, will help reduce some of the serious difficulties which we are experiencing in recruiting and retaining qualified staff members.

REQUEST FOR 1960

The \$3,087,000 requested in 1960 will enable us to complete three approved hospital projects which are well under way, proceed with construction of the 36 additional staff quarters, plan for the replacement of the hospital at San Carlos, Ariz., and continue work on making necessary improvements in all types of structures used in the Indian health program. Following is a distribution of funds planned under the 1960 budget:

Hospitals and clinics

Shiprock, N. Mex.:

Quarters and quarters furnishings_____	\$1, 200, 000
Movable equipment for hospital_____	107, 000
Powerplant _____	50, 000

Total_____	1, 357, 000
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Gallup, N. Mex.: Movable equipment for hospital_____	340, 000
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Kotzebue, Alaska: Quarters furnishings_____	32, 500
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San Carlos, Ariz.: Planning a new hospital_____	78, 500
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Total hospitals_____	1, 808, 000
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Quarters, 36 units_____	1, 000, 000
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Alterations_____	279, 000
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Total_____	3, 087, 000
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Direct Federal health services for Indians will be necessary at many locations for an indefinite period into the future. Construction and improvement projects essential for effective operation of the Indian health program are planned at locations where the needs are greatest and where the facilities will serve increasing Indian populations.

KEAMS CANYON HOSPITAL

Dr. SHAW. May I also say that all of our projects previously approved are either under contract or will be this fiscal year, with the exception of the new Keams Canyon Hospital which will be under contract in October.

Senator HILL. What has been the delay on that?

Dr. SHAW. That was changed from a modernization project to a new facility.

Senator HILL. Therefore, you had to change your plans? I mean you had to have new plans?

Dr. SHAW. That is right and request additional authority and it is moving ahead.

Senator HILL. It is moving ahead and you will let the contract, you say, in October?

Dr. SHAW. Yes, sir.

DISCONTINUANCE OF HOSPITALS

Senator MONRONEY. I have one more question: You are not planning to discontinue any of these hospitals during the next fiscal year?

Dr. SHAW. We do not have specific plans as of now. We can foresee, however, need for administrative action within the next year with regard to some of our tuberculosis facilities. We have had a marked decrease in tuberculosis, as I referred to earlier.

We have a very rapidly declining patient load in all of our tuberculosis facilities. Takoma, Wash., and the Shawnee Sanatorium are good examples. With this continuing favorable response to our program we can foresee not only the need for a continuing study but probably a need for some action within the next fiscal year.

Senator MONRONEY. And such action would be mainly on the tuberculosis item?

Dr. SHAW. Yes, sir. Primarily because of the decline in tuberculosis patients in our hospitals, particularly the tuberculosis hospitals.

Senator MONRONEY. Can they be utilized for other units?

Dr. SHAW. In certain locations, they could. In other words, this is going on in all of our hospitals. Of course, as the tuberculosis load comes down, the general medical and surgical load goes up.

We held the general medical and surgical load in abeyance pending our major attack on tuberculosis; so, if one goes down, the other goes up, but with respect to the tuberculosis load those hospitals suffering the greatest decrease in patient loads are in the areas where adequate provisions have been, or can be made, for the integration of the Indian into his local community health resources under contract. We probably will not have need for the facilities after that.

INDIAN PARTICIPATION IN HILL-BURTON FUNDS

Senator MONRONEY. I do not want to hold up the committee unduly, but under the Hill-Burton program, the States usually raise about half or two-thirds of the money.

In my State at least the Indian property is not subject to taxation. Is there any way you can participate as this Indian hospital load is shifted out of Government installations and into the local hospitals? If the local hospitals have to pick up that load now being cared for entirely by the Government, can you help share in the capital cost of these projects under the Hill-Burton program?

Dr. SHAW. The Hill-Burton program is separate and distinct from our own program in this respect. The Indian is being counted in the population base for all Hill-Burton projects; however, Public Law 151 passed by the last Congress made such participation possible and Congress provided \$1,750,000 for such purposes.

The Surgeon General can decide, and has decided in 10 instances to date, that additional beds are required specifically for Indian health needs in certain areas and these contributions are made in addi-

tion to Hill-Burton in those areas for the construction of such facilities.

Senator MONRONEY. That is what I wanted to know. I think that is a very fair way of treating it.

Dr. SHAW. We have 10 projects already underway and 2 of them, I think, are already occupied with Indian patients.

1959 REPORT COMMENT

Senator HILL. I would just like to call the Senator's attention to the committee report of last year and to these words:

Of the increase, \$1 million is specifically provided for the purposes of Public Law 85-151, which provides that whenever the Surgeon General determines, after consultation with the Indians, that the provision of financial assistance to one or more public or other nonprofit agencies or organizations for the construction of a community hospital constitutes a method of making needed hospital facilities available for such Indians, which is more desirable and effective than direct Federal construction, he may provide such financial assistance from funds available for the construction of Indian health facilities for such Indians.

In other words, he puts up a certain part, the local community puts up a certain part, and then the Public Health Service, under the Hill-Burton program, puts up a certain part.

In that way they provide the facilities for the community and also facilities that take care of the Indians; is that right, Doctor?

Dr. SHAW. Yes, sir.

Senator MONRONEY. It is much more economical when you need 10 or 20 beds to build them into a community hospital than to try to establish your own, or try to rehabilitate an obsolete hospital.

Dr. SHAW. That is correct.

More important, it brings the Indian and his community together, and it proves their acceptance on both sides and hastens the integration.

Senator HILL. That is a very important thing, is it not, Doctor?

Dr. SHAW. Yes, sir.

COMMITTEE RECESS

Senator HILL. The committee will now stand in recess until tomorrow morning at 10 o'clock, when we will have witnesses from the National Institutes of Health.

(Whereupon, at 1:02 p.m., Tuesday, May 5, 1959, the committee recessed, to reconvene at 10 a.m., Wednesday, May 6, 1959.)

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION,
AND WELFARE APPROPRIATIONS FOR 1960

WEDNESDAY, MAY 6, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room F-82, the Capitol, Hon. Lister Hill (chairman of the subcommittee) presiding.

Present: Senators Hill, Byrd, and Smith.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

NATIONAL INSTITUTES OF HEALTH

STATEMENT OF DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; ACCOMPANIED BY DR. C. J. VAN SLYKE, DEPUTY DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. JOSEPH E. SMADEL, ASSOCIATE DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. KENNETH M. ENDICOTT, ASSOCIATE DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. WILLIAM STEWART, CHIEF, DIVISION OF PUBLIC HEALTH METHODS; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

SUMMARY TABLES

Senator HILL. The committee will kindly come to order.

I have here a summary table showing the history of appropriations for the National Institutes of Health from 1950 through the House action on the current budget estimate. Also, a summary breakdown by activity for each of the institutes of the House allowance for 1960. These tables will be included in the record at this point.

(The tables referred to follow:)

History of appropriations, National Institutes of Health, 1950-60

	Budget estimate	House allowance	Senate allowance	Appropriation
1950-----	\$41, 246, 000	\$46, 371, 000	\$60, 563, 000	\$52, 146, 000
1951-----	62, 570, 000	61, 970, 000	66, 326, 000	¹ 60, 059, 750
1952-----	59, 034, 000	57, 301, 885	58, 431, 058	57, 675, 291
1953-----	55, 005, 000	53, 833, 500	58, 982, 000	59, 030, 750
1954-----	56, 340, 000	61, 586, 200	72, 153, 000	71, 153, 000
1955-----	71, 128, 000	77, 393, 000	85, 143, 000	81, 268, 000
1956-----	90, 314, 800	89, 773, 000	113, 416, 800	98, 458, 000
1957-----	126, 525, 000	135, 525, 000	183, 007, 000	183, 007, 000
1958-----	190, 183, 000	190, 183, 000	² 226, 783, 000	211, 183, 000
1959-----	211, 183, 000	219, 383, 000	320, 577, 000	294, 279, 000
1960-----	294, 279, 000	344, 279, 000	-----	-----

¹ Excludes \$3,216,250 rescinded by the Supplemental Appropriation Act, 1952, Public Law 253, 82d Cong.
² Includes \$4,573,000 reappropriation.

1960 House allowance

[In thousands]

Obligations by activity	Manage- ment fund	General re- search and services, NIH	Arthritis	Allergy	Neurology	Cancer	Mental	Heart	Dental	Total
Grants:										
Research projects		\$18,959	\$24,096	\$19,136	\$19,800	\$33,709	\$22,176	\$29,775	\$4,476	\$172,127
Research fellowships		4,560	337	866	536	1,712	1,396	2,663	500	12,570
Training		9,040	5,298	2,621	6,888	7,205	21,206	7,879	1,000	61,137
State control programs						2,250	5,000	2,125		9,375
Field demonstrations and studies						1,500				1,500
Total, grants		32,559	29,731	22,623	27,224	46,376	49,778	42,442	5,976	256,709
Direct operations:										
Research:										
Direct operating funds			4,719	4,971	3,231	6,432	4,273	4,637	1,058	29,321
Reimbursements:										
Research supportive services	1 (\$5,829)		942	723	588	1,613	854	888	221	5,829
Russian translation	2 (380)	(45)	(50)	(39)	(45)	(75)	(50)	(66)	(10)	(380)
Clinical supportive services	(8,926)		1,051	925	1,315	2,434	1,364	1,729	108	8,926
Business operations	3 (4,127)		557	476	384	1,352	681	543	134	4,127
Advances for nonformula items	(565)									
Cafeteria	(400)									
Total reimbursements	(20,227)		2,550	2,124	2,287	5,399	2,899	3,160	463	18,882
Total, research	(20,227)		7,269	7,095	5,518	11,831	7,172	7,797	1,521	48,203
Biologics standards:										
Direct operating funds	(435)	2,370								2,370
Reimbursement (Res. Svs.)		435								435
Total, biologics standards	(435)	2,805								2,805
Review and approval:										
Direct operating funds		558	328	222	346	415	678	479	124	3,150
Reimbursements	4 (2,626)	482	292	168	294	506	387	441	56	2,626
Total, review and approval	(2,626)	1,040	620	390	640	921	1,065	920	180	5,776
Training activities										
Professional and technical assistant					50		100	154		304
Chemotherapy contracts						5,666	1,838	1,226	1,190	9,920
Dental resources						18,142			772	18,142

GENERAL STATEMENT

Senator HILL. We are very happy to have with us this morning Dr. Shannon, Director of the National Institutes of Health; and Doctor, we will be delighted now to have you proceed in your own way.

Dr. SHANNON. Thank you, Senator Hill. It is again my privilege to appear before you on behalf of the Public Health Service, concerning the programs of medical research, research training, and related activities of the National Institutes of Health.

I have a fairly detailed opening statement, which you may wish to have placed in the record, and thus permit me to summarize it?

Senator HILL. All right, Doctor, we will put your statement in full in the record at this point and then you just proceed in any way you desire.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, NATIONAL INSTITUTES OF HEALTH, PUBLIC HEALTH SERVICE

Mr. Chairman and members of the committee, It is again my privilege to appear before you on behalf of the Public Health Service's medical research, research training, and related activities which comprised the National Institutes of Health.

In making the appropriation requests for our programs in 1960, I must first express to the committee, both for myself and my colleagues, and on behalf of the scientists and institutions directly affected and the millions of people directly and indirectly benefited, the deep appreciation we all feel for the fair and thorough consideration given to our appropriation requests each year. You have had the interest and taken the time to study what we do in detail; you have had the wisdom, recognizing that medical research is a truly national endeavor, to give audience to a diverse group of non-Federal leaders in science and public affairs before reaching a decision on these appropriations; and you have had the vision and judgment to create and maintain stability as an essential aspect of these programs.

The Institute directors and I welcome your inquiry into our activities at the National Institutes of Health and will do everything we can to provide the information you want and need in order to carry out the committee's business.

Stability as a factor in the support of medical research

Before reporting to you on the use of funds provided by the Congress for NIH programs in 1959, I would like, if I may, to say a further word about stability.

One might think there is something antithetical in annual appropriations for a stable research effort. Certainly the possibility of fluctuation in level of support is inherent in Federal as it is in all financing on a yearly basis. In research, a sense of fiscal insecurity could do irreparable damage. A scientist wants to feel he can complete a study upon which he embarks. The leader of a research team won't gather together a group of coworkers for a long-term project without being sure of the commitments he can make to them. A professor who is willing to head a new training program to develop additional scientific manpower in a shortage area must not fear withdrawal of support before his program has had time to produce results. Institutions which receive sizable funds from outside sources for research and training projects can plan and program adequately only if there is continuity in such support.

The factor of stability has been demonstrated to obtain in the programs whose appropriation requests are now before you. We are never challenged by grantees or grantee institutions with the question of whether or not the Congress will provide funds to meet our moral commitments. This is something of which the Congress may justly be proud. I stress it here because as the National Institutes of Health programs have grown and broadened, they have become a vital component of the national effort, in terms of both current support and research potential. They provide nearly 40 percent of the funds that are available from all sources for research in the health sciences. Those individuals and institutions who are the recipients of these funds have confidence in their source. They strongly endorse the policies under which the funds are made available—policies to which members of this committee have contributed significantly.

And they respond by developing creative research environments from which emerge findings that are intimately related to the better health of the American people.

General progress in National Institutes of Health programs

In discussing the National Institutes of Health 1960 appropriation requests with a committee of Congress, one finds it difficult to know where to break into a continuum that began before 1900, was sustained through several decades of distinguished contribution in the nutritional and communicable diseases, and developed in its present-day sense from about 1945. There are several who will take part in these hearings, including the chairman of this committee, who have first-hand knowledge of each step since then in the forward march of these programs. It would be enlightening to any new members of the committee and a pleasure for me were I to describe the steps: the initiation of the research grants program; the development of each of the Institutes; the start of fellowships at predoctoral and postdoctoral levels; the planning, construction, and occupancy of the Clinical Center; the progressive importance of training grants and awards; the addition of authorization to give grants to assist in the construction of research facilities; the use of program grants in certain areas, and the gradual increase in the size and duration of other research project grants; the strengthening of all programs, both research and training; in the fundamental sciences. There is almost no end to the steps that could be recalled during our growth and maturation process. All that can be done here is to reassure the committee that it has been a satisfying and productive period of growth and change. This is confirmed by the nature and dimension of the research activity in Bethesda and in the more than 700 non-Federal institutions which are recipients of grant and award support derived from appropriations provided by the Congress for them, and through us.

Considerations governing fiscal year 1959 operations

My report to you on what has been accomplished through National Institutes of Health appropriations in 1959 should begin with a recapitulation of the essential fiscal and functional situation presented by your actions.

The 1958 appropriation level, exclusive of construction, was \$211.1 million. This was increased to a program authorization of \$294.3 million in 1959, or an increase of \$83.2 million.

A study of the hearings and reports of Congress, as related to these appropriations, reveals six primary observations and instructions of Congress to be applied in the expenditure of these funds, as follows:

(1) The Congress wished to assure that fund limitations in themselves should not be a barrier to the performance of medical research judged to be worthy of support, provided this can be accomplished in facilities that are suitable and by scientists of competence.

(2) The Congress anticipated further expansion of medical research in the future, supported by diverse sources, as evidenced by the striking increase in the funds devoted to the training of future research investigators.

(3) The Congress accepted the advice of various counselors that certain program areas require special attention, in that they are ready either for developmental research or for a broadening of the base of fundamental studies already underway.

(4) Although there was extensive earmarking of funds for specific research targets, the Congress again emphasized the need for the conduct of research and training in the sciences basic to medicine.

(5) The Congress continued to express high confidence in the National Institutes of Health direct operations.

(6) The Congress expected the National Institutes of Health to program effectively as much of the total appropriation as feasible; however, in its injunctions not to sacrifice quality standards in undertaking the expansion, the Congress gave implicit recognition to the fact that facilities, or personnel shortages, or particularly time limitations might make the full expansion impossible within the fiscal year. In this connection, the Congress enjoined us against the transfer of funds out of the program area for which they were appropriated in order to meet deficits in some other area.

We have carried out your wishes to the very best of our ability. In particular, we have given attention to the maintenance of the quality standards which have become conventional. We have also made a major effort to engender interest and substantial program levels in areas identified as having special promise.

A summation of 1959 operations

The product of our effort can be subjected to many kinds of assessment. In fiscal terms, our initial projections developed last summer indicated an ability to program \$74.2 million of our 1959 increases, leaving \$9 million in unprogramed sums. The bulk of the unprogramed funds were in research grants and in fellowships and training grants and awards. This prediction was the result of three factors: Our unwillingness, and that of our advisors, to compromise on questions of quality; our inability to use excess funds in one budget activity to meet needs in another; and the inherent difficulty in mounting sizable programs in new research areas in the span of a few months.

As the fiscal year has evolved, it now appears that certain of our projections need to be modified. A number of our programs have developed more rapidly than was indicated in our original predictions; some have developed more slowly. Upon completion of definitive analyses, proposals to modify our current apportionments were made, and I am very glad to report that this modification of apportionments was reported to us to have been approved, making available \$3,799,000 of the \$9,006,000 put in reserve.

The product of our efforts in the past year in program terms is gratifying indeed. And the product of our investigators and the scientists receiving grants, in terms of research findings directly and ultimately related to the control of disease in man, once again confirms the fundamental premise that in research lies the promise of dramatic reduction of the biological and behavioral impairments which cause extended disability or premature death—a promise which, for many conditions, has already become a reality.

I shall not undertake to summarize either the program developments or the research highlights of the past year resulting from the individual National Institutes of Health appropriations. Such testimony can be better and more appropriately presented by the Institute Directors, who are looking forward to discussing with you the major developments in their fields of special interest. In addition, we shall be happy to make available to you some prepared materials which indicate the accomplishments in each field of study.

Rather, as Director of the National Institutes of Health, I should like to bring to the committee's attention some of the major general developments in fiscal year 1959 affecting the National Institutes of Health as a whole. I ask your indulgence to do this in the form of simple enumeration. My colleagues and I are prepared to elaborate on any item that has special interest for the committee.

Program developments—1959

These are some of the important program elements that have emerged in recent months.

(1) We have engaged in an intensive and multi-faceted appraisal of the impact of the effectiveness of our present programs and their impact on the individuals and institutions making up the community of medical science. With the assistance and cooperation of outside groups, these studies—which are only a step in what I am convinced must be a continual process of analysis and self-appraisal—will provide essential information to guide us in the evolution of our programs in the years ahead.

(2) With an increase of \$44.2 million over fiscal year 1958 for research project grants, it has been possible to strengthen both the substance of medical research in the medical schools, universities, and related institutions, and at the same time to strengthen the research component of the institutions themselves. New study sections have been added to permit the review of applications that were more numerous and representative of more diverse research fields without compromising the quality of review. The pressing problem in the research grants program continues to be the inability to compensate the already hard-pressed schools for the full amount of the indirect costs of conducting research supported by Public Health Service grants.

(3) The National Institutes of Health training and fellowships programs which have grown from \$17 million in fiscal year 1956 to \$60 million in fiscal year 1959, in recognition of the overriding importance of scientific manpower to the research effort in the years ahead, have given every evidence of effectiveness in meeting this need. In recognition of the consequence of this program area, the Surgeon General accepted my recommendation (at the same time as Dr. Van Slyke received long overdue recognition by being appointed to the newly created post of Deputy Director of the National Institutes of Health) to

establish a National Institutes of Health Associate Director for Training and to elevate to this position Dr. Kenneth M. Endicott, who had directed our cancer chemotherapy program so brilliantly.

(4) During the year, through a series of meetings, publications, and other steps reflecting in large measure the spontaneous interest of industry, better understandings were achieved with leaders of the pharmaceutical and chemical industry with respect to their participation in the national medical research effort. Among the questions under discussion were the support of certain research in industry by the National Institutes of Health contracts and grants, patent and other problems involved when industry research is supported by tax funds, and the respective interests of industry and Government in the whole field of drug research and development.

(5) A major organizational development has been the creation of a Division of General Medical Sciences. Formed from research grant and training activities of the Division of Research Grants, and also incorporating the Center for Research on Aging, this program change has been made in recognition of two primary factors: First, the size and importance of the program itself, directed largely to the preclinical sciences and those areas of fundamental inquiry unrelated to the mission of any institute; and, second, the increasing stress that must be placed on both the scientific review processes of our grants programs and their continued evaluation and analysis, making it essential for the Division of Research Grants to be divorced from the bulk of its direct operating programs so it can concentrate on these services to all of the extramural activities.

(6) Satisfying progress has been made in the several large-scale, long-term collaborative programs—the search for better chemical agents to treat cancer, the evaluation of the mode of action and therapeutic efficacy of psychopharmacologic agents, the effort to uncover the prenatal and postnatal influences that may be related to the causation of such conditions as mental retardation and cerebral palsy. These represent major segments of our investment in research, and we are doing everything we can to see that they evolve in an orderly and efficient fashion which will yield not only answers in their target areas but also basic knowledge which may be applicable to the understanding and solution of other medical and public health problems.

(7) In other special research areas of demonstrated interest to the committee—areas such as gastroenterology, staphylococcus infection, cystic fibrosis, schizophrenia, new drugs in heart disease—the forward movement has been gratifying but less uniform. The committee is well aware, as we are, that when essentially new and additive areas of research interest are superimposed on medical science, as a result of the awareness of deficits in those areas and the stimulus provided by the availability of funds earmarked for this purpose, it is not always possible to combine research interest and available facilities to produce an effective program in any given year. When such special effort is made to develop a new field over a period of several years, however, it is evident from our experience that the interest, competence, and facilities can be mobilized and the potential for progress in the specified field thereby enhanced.

(8) Among the developments of the past year of a general nature which augur well for the future are those related to the initial, formulative steps toward applying the knowledge, skills, and instrumentation of the physical sciences to biological problems, and mounting a broadly based exploration of the many interesting leads related to the possible viral origin of cancer. It is when one undertakes to help set such programs in motion, programs that cannot accurately be evaluated until 5–10 years have passed, that he particularly appreciates the understanding this committee exhibits concerning science and its processes. When it is possible to view fiscal year 1959 in perspective, it may be that the investments made in such fields will have been the most significant aspect of our programs.

(9) In our own facilities at Bethesda and in the field, there has been steady progress resulting in part from the quality of the individual scientists and the special opportunity afforded them by our facilities, and in part from a developing sense of cohesiveness and purpose. The latter aspect is in no small measure related to the leadership and stimulus provided by our truly outstanding group of scientific directors and the National Institutes of Health Associate Director with whom they are closely associated in program planning, Dr. Joseph E. Smadel. Our staff and our facilities continue to work effectively with the entire community of medical science, and excellence continues to be the governing factor now that the period of growth has been largely accomplished.

CONSTRUCTION AT BETHESDA

(10) In terms of the new construction at Bethesda that has been authorized and/or financed by the Congress, there are four major projects to be reported on:

(a) The new building to house the Division of Biologics Standards is well along, on or perhaps even ahead of schedule. The builders expect it to be ready for occupancy before the end of 1959, and our scientific staff is looking forward to reoccupancy of the space they—that is, the Division of Biologics Standards—in our common interest, had to give up to permit temporary housing of the expanded work, both regulatory and research, of this program so vitally concerned with the development and control of biological products.

(b) Bids are due on May 19 and contracts will be let by June 18 for the basic structure which will extend the surgical facilities of the Clinical Center. We have spent a great deal of time in the design and planning of this unique surgical wing, tailored to the specialized needs of research in neurosurgery and cardiovascular surgery. The resulting facility, scheduled for completion in November 1960, will be a model of its kind and represent the most modern concepts of the utilization of space and structure to serve a program in research surgery.

(c) The construction has started for the new building to house the laboratories of the National Institute of Dental Research. Completion and occupancy are estimated for January 1961.

(d) Progress on the new office building has encountered some delay due to work overload in the staffs of the contracting architect and PBS. Plans are scheduled for completion on May 11 and advertisement of bids on June 1. Construction should be underway by August. Since the NIH was planned for laboratory and clinical investigations, and was not planned for the essential office functions associated with the grants and other support functions, the office space factor is critical. We are urging all possible speed on this project to permit the return to Bethesda of many of our staff now in rental space, mostly in Silver Spring, and to permit the reconversion to laboratories and animal facilities of space at Bethesda which now must be used for offices.

I might say that we have completed a series of studies on the office structure—not the office structure alone, but really the entire series of buildings of the National Institutes of Health—in connection with our air-conditioning capacity. It might well be that within the coming month or two it will be necessary for us to recommend to the Department that they should request authorization to enable us to expand the air-conditioning unit to provide adequately for the structures that are planned and, of equal importance with a plant as large as ours, to provide a certain minimum of standby equipment. In other words, at the present time there is no standby equipment, and we feel this is a dangerous thing. We felt initially that we had planned adequately, but in the final analysis the architectural plans for the dental building, the laboratory building for the Division of Biologics Standards, and the office building have essentially a 50-percent increase in air-conditioning requirement, which just about broke the back of our present plan. This is not going to be any sizable expense, but it will be some addition that I am not sure is covered in our present authorization. We have made recommendations or are about to make recommendations to the Department as to the development of a mechanism for solving this problem.

(11) Finally, with respect to fiscal year 1959, I am pleased to report that 5 years of occupancy of the Clinical Center have amply demonstrated the capacity of that splendid structure to subserve the program needs of the Institutes for clinical as well as laboratory investigations. More than 12,000 patients have been admitted to the Clinical Center according to the research needs of the clinical investigators. The many services associated with patient care are working smoothly, the professional relationships with the neighboring medical community—that is, the District and Montgomery County are sound, and the bed occupancy levels are both high enough and steady enough to permit the generalization that the facility is being effectively utilized.

I would like to interject a comment here that I feel to no small measure is due to our good fortune in having Dr. Jack Masur return to us, and he, as Director of the Clinical Center, deserves a major share of the credit for this. The remainder, I think, can be attributed to Dr. Smadel and the close working relationships he has had with the Institutes' clinical directors, with a net result that is highly commendable.

The foregoing summation of our experience in fiscal year 1959 is one that can be presented with pride and with confidence that the job done has been responsive to the wishes of Congress.

1960 budget request

The budget proposals that are before you for fiscal year 1960 request continuation of our programs in that year at the level of the appropriations for fiscal year 1959, except for a reduction from \$30 million (the full amount authorized) to \$20 million in matching grants to assist in the construction of health research facilities. Other than this, there are a few minor variations in the proposed allocation of funds, but these do not affect the total of any one of the Institutes or the National Institutes of Health as a whole.

The individual Institute directors will appear before you to discuss what is proposed for their programs in fiscal year 1960, and Dr. Van Slyke will testify on the health research facilities program. In addition this year, in the light of the increasing size and importance of the program encompassed within the Division of General Medical Sciences, we have asked the head of that program, Dr. G. Halsey Hunt, to appear before you. The other component of the appropriation item identified as "General research and services, National Institutes of Health" is the Division of Biologics Standards, whose operating performance in fiscal year 1959 and proposals for fiscal year 1960 are summarized in an attachment to this statement, which I will be glad to furnish for the record if it is your wish.

There are also available to the committee, should you wish them, statements summarizing the activities of each of the four divisions which provide centrally the services required to maintain the programs of the several Institutes—the Clinical Center, the Division of Research Grants, the Division of Research Services, and the Division of Business Operations.

Just as it is difficult, in a continuum such as medical research, to look back at the year just past and pick out its most important aspects, so it is well-nigh impossible to predict with any degree of accuracy the results of the year ahead in terms of discrete scientific observations which can be applied in medical and public health practice.

On the other hand, when one looks at the decade ahead, the patterns of progress begin to emerge more clearly. It is possible to perceive trends in the organization of medical research and in the mobilization of resources for its effective prosecution. And it is possible to see certain trends in the substance of the life sciences, and even single out the areas in which the major advances are most likely to occur.

General considerations in the future of medical research

For a wide variety of reasons and by a large number of groups, the future health of the Nation is under continuous, intensive study. Some are concerned with meeting the health challenge inherent in the rapid growth and changing age composition of our population. Some are concerned with the economics of medical care and the economic burden of disability and premature death. Some are concerned with our comparative, competitive position in health relative to our sister nations of the world. Some are concerned with the qualitative and quantitative aspects of health programs, and some are directed to the question of balance between public and private support.

All such studies require consideration of medical research, since the development of new knowledge is not only intimately related to, but often governs the characteristics of other activities which apply knowledge to human health.

As the committee knows, we have completed studying the research needs of and the impact of the National Institutes of Health support programs on 20 selected medical schools. This study, too, is yielding valuable information on the shape and dimension of medical research in the years ahead. Yet, in the final analysis, adding up the available information from all sources and projecting future trends is more a subjective than it is an objective undertaking.

In my judgment, these are some of the most important things to be looked for as medical research evolves in the years ahead.

(1) There will be increasing need for those who formulate and carry out national policy to be concerned not just with the strength of the medical research effort, but with the total strength of the institutions of higher learning in which the bulk of such research is carried out and where the spirit of free inquiry flourishes.

(2) As an increasing proportion of university-oriented medical research is supported from outside sources, each of its own special mission, there will be greater urgency for the sources of support to recognize the needs of grantee institutions for making their own determinations as to the direction of their research effort and the relative emphasis given both to different fields of inquiry and to the balance between research and their other functions.

(3) Since the availability of trained scientific manpower is the key to many of the research doors that remain locked, and since this factor is more likely to impede scientific progress than the availability of research facilities or funds for support of specific projects, there will be modifications and extensions of existing programs so that more scientists, both M.D.'s and Ph. D.'s, will be developed, and so that the career opportunities in science will be more apparent, more stable, and more rewarding.

(4) In addition to sustaining patterns for support of sound individual research projects, there will be a marked increase in medical research that is organized on a voluntary and collaborative basis. Such cooperative endeavors will protect the individuality of the participating scientists and at the same time recognize that certain questions can best be attacked when a comprehensive, agreed upon plan exists to explore every facet of the problem, using all known approaches and all relevant scientific disciplines.

(5) There will be increasing evidence in the patterns of research support and in the substance of the work supported, that the urgent problems of disease in man must be approached both by free and undirected inquiry at fundamental levels and by intensive study of the disease or condition itself, seeking leads as to possible means for prevention, diagnosis, and treatment despite the absence of knowledge of cause.

(6) There will be progressive demolition of the geographic and political boundaries which limit the ability of science to advance with optimum speed and effectiveness.

(7) There will be significant improvement in the techniques by which scientists communicate with each other, with the professions that must better understand science in order to use its product, and with the people as a whole. As a result, there will be marked improvement in the processes by which advances in research are identified and readied for application.

(8) Because better health is a primary public objective, and because research is recognized as a way to better health, there will be increasing public support of medical research and demand for its effective prosecution. Any such positive aspiration of the people takes many forms and finds many modes of expression. The normal interplay of these forces will cause support of medical research to be maintained in that balance between public and private sources which is characteristic of our society.

Thus, in the long view, there appears to be ample reason to be optimistic about the future of medical research.

Trends in the substance of medical research

It is much more difficult to project trends in the substance of medical research. Characteristically, it is the unexpected new leads, the swift turn of events, the brilliant synthesis of diverse and seemingly unrelated findings, that occasion changes in direction and points of emphasis in science. And these, of course, cannot be predicted.

On the other hand, those who plan and administer research programs must undertake to estimate these things in order to anticipate emerging needs in terms of manpower, facilities, and support.

(1) It seems almost certain, for example, that one of the major substantive developments in the years ahead will be related to the increasing involvement of the physical sciences in the study of biological problems. This includes not only the skills, knowledge, and point of view of the physical scientist but also the instrumentation and the means for quantification of data which have been developed in this field.

(2) In the same sense, there is growing awareness of the importance of the behavioral sciences as part of the total approach to understanding biological problems. As research areas are better defined and understood, it is evident that the interrelationships among somatic, psychosomatic, and psychic illness are close indeed.

(3) It can be anticipated that medical research in the future will give progressively greater attention and emphasis to the environmental factors that may

be associated with the causation of disease, as well as those associated with the positive maintenance of good health.

(4) It is probable, too, that stress will be placed on the study of population groups—using selected samples, both at home and abroad, with striking similarities or gross differences, and studying and manipulating the variables in an effort to identify the factors related to the occurrence or nonoccurrence of disease.

(5) On the other end of the spectrum, science will undoubtedly extend and intensify its probings of the very secrets of the life processes themselves—of cells and their requirements and the events that cause their destruction or uncontrolled proliferation, of macromolecular and micromolecular—large molecule and small molecule—particles and their action and interaction. It is one of the challenges and frustrations in cancer research, for example, that the ultimate understanding of cause may come from study of the smallest known particles of organic matter, to large population groups with either high or low cancer incidence, or anywhere between the two extremes.

These and other substantive trends in medical research may or may not take place. By action, a nation or a family of nations can foster conditions which encourage them to evolve. But in the final analysis, they spring from the state of knowledge at any given time, the motivating forces of the body scientific, and the insight of science into its responsibilities both within itself and to society.

One irrefutable point emerges. The term “medical research” has won widespread and popular usage. It is a good one, in that—like our categorial Institutes at the National Institutes of Health—it automatically focuses on one of the purposes of research; that is health. But it, like so many other terms, must be given context for usage. As I use the term, it is not “medical” research in the restrictive sense. It is a blend of the biological, physical, behavioral, and social sciences, used as required for the better understanding of health and better control of disease in man. And it draws upon and supports its full share of fundamental inquiry which is not designed to have relevance to any particular field of research, but may have.

Conclusion

I know the committee will have reason to be pleased with the reports of progress from the Institute directors and others representing the nine appropriation requests which together form the operating programs of the National Institutes of Health.

The past year has been full, challenging, and sometimes difficult for all of us. But I feel we have moved ahead on many fronts. The reward lies in the degree to which, through the appropriations you make to us—appropriations made on behalf of the people and directed to the improvement of their health—we are able to meet the present needs and enlarge the future capacities of medical science, which does give, and can continue to give in ever-increasing measure, life itself.

EFFECT OF HOUSE ACTION

The House of Representatives, acting on the 1960 appropriations for the Department of Health, Education, and Welfare, increased the President's budget by \$50 million (from \$294 million to \$344 million) for the eight appropriations for operating programs administered by the National Institutes of Health. In addition, the appropriation for construction of health research facilities was increased by the House from \$20 million to \$30 million.

As the Secretary indicated in his testimony last week before this committee, these increases are contrary to the fiscal policy of the President.

The following information is provided at your request to explain how these increases would be used if enacted.

1. *Research grants, \$29,717,000.*—The increase voted by the House of Representatives would be used for the support of a greater proportion of the research grant applications which are expected to be recommended by the advisory council in 1960. It should be noted that in its action the House continued the limitation on the payment of indirect costs (overhead) at 15 percent on research project grants.

2. *Training grants and awards, \$13,372,000.*—The increase voted by the House would be used primarily to increase the output of scientists trained for research and academic careers in the basic medical sciences (biochemistry, pharmacology, physiology, genetics) and to strengthen training programs in areas of clinical investigation where recognized shortages exist. The emphasis here is on post-

graduate training for research, with special attention given to increasing the number of individuals receiving senior research fellowships which permit their gradual absorption into the faculty of medical and related institutions.

3. *Direct research, \$2,525,000.*—A portion of the House increases would be used for mandatory pay (wage board) and other increases in the cost of research at NIH's own laboratories at Bethesda and in the field, for the provision of improved logistical supporting services in support of this research effort, and for costs associated with the activation of additional research space.

The remainder would be used for such activities as: research in physical biology, the collaborative study (with St. Elizabeths) of new drugs in the treatment of mental illness, the further development of the Middle America Research Unit (in Panama), and the study of the possible role of viruses in the etiology of cancer.

4. *Application of research knowledge, \$3,587,000.*—The increase voted by the House, if enacted, would be used to extend the communication and application of knowledge through control, demonstration, and technical assistance programs, with special attention to tests for the early diagnosis of cancer and use of modern techniques for the care and treatment of the mentally ill.

5. *Review of grants and general administration, \$799,000.*—If the extramural programs were to be expanded based on appropriation increases voted by the House, it would be necessary to extend and strengthen the processes by which applications for support are reviewed and recommended for payment. The high standards of review and objective scientific appraisal are vital to the effectiveness of the entire support program and must be maintained.

6. *Construction of research facilities, \$10 million.*—The amount voted by the House would increase this program to its maximum authorized level of \$30 million. Recommended projects are available to utilize this increase.

7. *Direct construction.*—The House disallowed a request of \$150,000 for construction of an animal facility at the Rocky Mountain Laboratory at Hamilton, Mont.

As a matter of professional judgment, the members of the NIH staff believe there is ample evidence that the increases voted by the House can be effectively utilized and meet demonstrable needs. We recognize, however, that we cannot be fully conversant with all of the economic and other considerations which must go into the formulation and execution of a total budget for the Federal Government, and that the final action of the Congress and the President must take all such considerations into account. For overall budgetary consideration, the Department has recommended that the increases over the President's budget be eliminated by the Senate.

ATTACHMENT A

DIVISION OF BIOLOGICS STANDARDS

BACKGROUND

The Federal Government's responsibility for the control of biological products began on July 1, 1902, with the passage by the Congress of an act to regulate the sale in interstate commerce of all viruses, serums, toxins, and analogous products applicable to the prevention and cure of diseases of man. The statute, now included in the Public Health Service Act, is basically the same as in 1902, when the technical responsibilities of the biologics program were assigned to the National Institutes of Health, then known as the Hygienic Laboratory. In 1937, the Laboratory of Biologics Control was created within the National Institutes of Health, and in 1948 it was made a part of the National Microbiological Institute. In June 1955, authority was granted the Surgeon General by the Secretary of the Department of Health, Education, and Welfare to expand the biologics control function of the Public Health Service to the status of a separate division within the National Institutes of Health, called the Division of Biologics Standards.

GENERAL MISSION

The primary function of the Division of Biologics Standards is to administer the provisions of the Public Health Service Act and regulations pertaining to the safety, purity, and potency of all biological products offered for sale, barter or exchange in interstate commerce or for export or import. Such products include vaccines, antitoxins, therapeutic serums, and human blood and its derivatives.

Biological materials are derived for the most part from pathogenic or potentially pathogenic microorganisms. Principally for this reason, the preparation of these materials requires careful control to minimize safety hazards which might occur in the course of processing. In addition to safety precautions, control measures are necessary to assure final products of satisfactory potency. Effective control requires the designing and development of adequate and practical standards for production and testing, careful surveillance of production methods, and a continuing effort to achieve improvements in testing procedures.

The introduction in the early 1940's of a new method of producing vaccines by growing the microorganisms in embryonated hen's eggs, marked the beginning of rapid medical advances in the general area of infectious disease therapy. The first of these vaccines were typhus vaccine and yellow fever vaccine. Before that time, with the exception of smallpox and rabies vaccine, all immunizing agents were produced by classical bacteriological methods. In 1955, probably the most significant change was initiated when poliomyelitis vaccine was produced with the newly developed tissue culture technique.

These scientific advances have resulted in a vast increase in the volume and types of such products being marketed, with an attendant major change of attitude and approach in the industry. It has become keenly competitive, with manufacturers now engaged in extensive, and very costly research programs, each vying for vantage positions through the introduction of new and improved techniques.

These large-scale research activities by industry make it imperative for the control agency to keep abreast of the advances constantly developing by augmenting its research facilities and maintaining adequate developmental research programs.

Control activities

A system of licensing remains the basis upon which the control of biological products rests today as it did in 1904 when the first establishment was licensed to produce smallpox vaccine.

This system involves the issuing of both establishment licenses and product licenses following the determination by the Division that prescribed standards for safety, purity, and potency have been met. These standards are set forth in regulations which are continually reviewed for adequacy in the light of new advances. Additional standards are formulated as new products are developed.

During the past year the first set of specific regulations for a blood product became effective with the approval of standards for the processing of human whole blood. Prior to that time control of this product had been affected by the general provisions of regulations for all biological products supplemented by more detailed technical guides prepared by the Division. With the steadily increasing use of blood and blood products these processing methods became stabilized sufficiently to warrant their translation into regulations which will also provide a foundation for the future development of control measures for other blood products.

A total of 270 separate biological products are now licensed. These are manufactured in 164 licensed establishments for which over 1,100 product licenses are in effect. A major activity of the control program related to the extent of this activity is the review of manufacturer's records of production and testing and the testing in the Division's laboratories of representative samples of these products. Tests, ranging from relatively simple sterility tests to complex, time-consuming, costly potency determinations are carried out each year on approximately 3,000 individual lots of a wide variety of biological products.

In addition to the inspection of manufacturing facilities and procedures prior to the issuance of a license, each of the licensed establishments is inspected annually to assure continuing compliance with prescribed standards. Supplementary special inspections are carried out whenever indicated. Close liaison is maintained with representatives of professional and technical staffs of the establishments involved regarding proposed plans for new facilities and for modification of existing structures and equipment devoted to the production of biological products insofar as they may affect the safety, purity, and potency of these products.

In order to assure that each manufacturer markets a licensed product consistently acceptable and of uniform potency, standard physical references preparations are developed wherever possible and are furnished to industry for use in assaying each lot or batch of such products, approximately 4,000 vials being distributed annually by the Division.

The control of biological products has been characterized from its beginning by the close cooperation between the Division and the manufacturers. Frequent meetings are held between members of the Division's professional and administrative staffs and groups of manufacturers who are concerned with common problems. In addition, from 150 to 200 conferences are held each year with technical representatives of individual manufacturers who desire to discuss with members of the Division staff production and testing problems peculiar to their own organization.

Through such close cooperation with the technical representatives of industry as well as with independent investigators throughout the Nation the Division is frequently able to identify potential problem areas in biologics production and control before serious difficulties arise.

Division scientists, serving as members of international study groups, have taken an active part in the World Health Organization's program for the development of international uniformity of biological products. This year, international recommendations, based on U.S. experience, were developed for poliomyelitis vaccine by one WHO study group, and recommendations for yellow fever and cholera vaccines by another group. Adoption of such requirements by national control authorities for these and other vaccines will serve to promote worldwide improvement and uniformity of these products, and will permit the free exchange of such substances between Nations in times of emergency.

Research activities

The control program of DBS is necessarily supported by an active research program which enables the Division to keep abreast of the development of new and improved immunizing agents and to prepare physical references as well as testing procedures for these products once they are ready for commercial production.

This year, as the procedures for the production and control of poliomyelitis vaccine became stabilized, and the current problems of influenza vaccine were met, the Division's research efforts were directed toward investigations in other fields of importance, one of which was the complex problem of live virus vaccines.

A test using the test tube instead of living monkeys has been studied which helps to differentiate between virulent and attenuated polio virus. The poorer growth of attenuated polio virus strains in continuous live monkey kidney cell tissue cultures has been shown to be in agreement with their low degree of virulence in living monkeys as judged by their effect on the central nervous system. The Division is planning to use this technique to determine the genetic stability in human beings of the attenuated polio viruses now being considered and studied by independent investigators for use in living polio virus vaccines.

As tissue culture methods become applicable to the production of further vaccines, and as the supply of monkeys becomes more limited, investigative work on substitute tissue cells is increasingly important.

A simplified method of measuring the potency of poliomyelitis vaccine in a quantitative manner using chicks instead of monkeys, which has been under intensive study by DBS scientists for the past 2 years, has now been perfected. A collaborative study with industry in 1957 showed that the baby chick was a promising test animal; monkeys have been used thus far. During the past year, vaccine manufacturers and the DBS have used the chick potency test concurrently with the monkey potency test on a trial basis. Data on the relative merits of the two tests now indicate that the chick test provides reliable measures of potency for all three vaccine strains and is a less complex assay procedure. It is anticipated that this test will replace the monkey potency test early in 1959.

DBS scientists have also developed a test-tube potency test for poliomyelitis vaccine, based on the observation that antibodies will combine with either virus or vaccine. The test is a valuable addition to the techniques available for testing the vaccine's antigenicity in that it is simple, economical, and reproducible from one test to the next as compared with the animal potency tests.

Means of extending the range and sensitivity of the monkey safety test for poliomyelitis vaccine are under study and results using a method of concentration of the vaccine prior to injection into the monkeys are promising.

With the growing desire for multiple antigen preparations so that children can be immunized against diphtheria, tetanus, whooping cough, and poliomyelitis simultaneously, research to determine the possible effect of such combinations

on the safety, purity, and potency of these products, as well as the suitability of existing testing procedures is essential. Adequate control of such multiple products frequently requires the development of new testing procedures and the modification of required standards. The Division has been working closely with the manufacturers in this respect.

The Division has continued to utilize the assistance of the Technical Committee on Poliomyelitis Vaccine and to maintain close cooperation with the technical representatives of industry, giving attention to problem areas, both actual and potential. As a result, changes designed to improve the vaccine, continued to be introduced.

While the problems inherent in the testing and clearance of over 61 million doses of the monovalent and polyvalent Asian strain vaccine were met by January 1958, manufacturers continued to produce the polyvalent influenza vaccine. By October 15, 1958, 73 lots of this vaccine had been cleared for release, representing a gross volume of approximately 12 million doses. Potency determinations of the vaccine based on the mouse antigenicity test have been reinstated.

Keyed to the possible production of a measles vaccine in the near future, studies relating to the eventual preparation of a standard reference reagent as well as the standardization techniques appropriate for the effective evaluation of such an immunizing agent are underway. Collaborative work is also being carried out with other research and development laboratories in the development and testing of experimental measles vaccines.

Work on the standardization of gamma globulin for measles antibody content is also being pursued so that it can be used more effectively in the control of measles epidemics.

Continuing studies on the standardization of smallpox vaccine using cell culture methods have developed evidence that primary rabbit kidney cells provide a sensitive and reproducible technic for the measurement of the viral content of the vaccine. Collaborative studies with other laboratories are presently being conducted to determine the correlation of this method of potency testing with the present titration method. As a result of improvement in laboratory methods, further studies are being made to compare clinical tests of potency with results obtained in laboratory animals. This work is also being applied to a study of the stability of dried smallpox vaccine with other laboratories interested in the problem.

DBS scientists are actively participating in a study sponsored by the National Research Council of various forms of plasma products that would provide safe and relatively inexpensive blood volume expanders for defense agency stockpiling. One of the principal problems in the processing of plasma preparations in which the Division is vitally interested is the inactivation of the agents of serum and infectious hepatitis. Results indicate that the new preparations are not suitable for stockpiling at this time because of protein changes of unknown clinical significance or because of a lack of experience to support shelf-life and salvage value.

The long-term study of the effects of conditions of storage on albumin started 4 years ago indicates that changes occur in liquid albumin stored at ambient temperatures. These studies will provide a basis for recommendations for attaining a maximum storage life for albumin in the emergency stockpile.

Studies of long-term preservation of red blood cells have served as a basis for establishing a bank of extremely rare bloods for emergency use. The blood with added glycerine is stored at -45° C. and probably can be stored for 3 or more years. This application of fundamental research to the practical problem of extending the storage period of blood clearly indicates the feasibility of the methods, but more work must be done to reduce the labor required in processing.

Studies were completed and reported this year on a cross-match pilot tube. The new tube maintains an adequate pilot sample of blood, intended for transfusion, for at least a month. This paves the way for increasing the storage period for whole blood for transfusion.

1960 ACTIVITIES

Dr. SHANNON. Thank you, sir.

The statement concerns the 1960 programs of medical research, research training, and related activities of the National Institutes of Health of the Public Health Service.

Stability of support is highly important to medical research. Grantee institutions, largely dependent on outside support for their research activity, have confidence in the stability of funds provided through NIH appropriations, and endorse the policies under which the funds are made available.

In summarizing 1959 operations, the statement reviews the stated wishes and expectations of Congress—that sound research should not be limited by lack of funds, that resources for future research should expand as a result of training and construction programs, that certain program areas should receive special attention, that basic studies should be strongly supported and that funds should not be shifted among programs if the designated use is not immediately feasible.

MAJOR PROGRAM DEVELOPMENTS

Major program developments of recent months are enumerated:

(1) NIH continued, with the aid of non-Federal groups, to appraise its own programs.

(2) Through increased funds, research was augmented in medical schools and other grantee institutions.

(3) A position of NIH Associate Director for Training was established to meet growing responsibilities in fellowship and training grant areas; and at this point I would like to introduce Dr. Endicott, who is a new Associate Director. We are very fortunate in having a man of his background to take this important job. He started off as a bench scientist with very extensive experience in the field of dermatology and related areas.

He was then transferred over to important administrative posts in the Cancer Institute, and then gave leadership to the whole evolution of our cancer chemotherapy program.

We took him on as Associate Director to really explore, in definitive fashion, the overall training needs of the country, and we feel this program will evolve very effectively under his leadership.

Senator HILL. We are very happy to have the doctor with us this morning. We welcome you, Doctor.

Dr. SHANNON. Now I will continue with the major program developments of recent months:

(4) Relations with the pharmaceutical and chemical industry were clarified during the past year.

(5) A Division of General Medical Sciences was created, with broad research grant and training functions; and in that connection you will have the pleasure of hearing Dr. Halsey Hunt, Chief of the Division of General Medical Sciences, as to that.

(6) Progress was made in large-scale collaborative programs—cancer chemotherapy, psychopharmacology; perinatal studies.

(7) Productive research was stimulated in such special areas as gastroenterology and cystic fibrosis.

(8) Initial steps were taken in long-range efforts to develop the field of physical biology and to investigate cancer-causing viruses.

(9) There was mounting evidence that an expansion of international NIH activities would be fruitful.

(10) The NIH staff at Bethesda made notable advances in cystic fibrosis, continuing to work effectively with the entire scientific community, and I should say the scientific communities of the world.

(11) Four major building projects at Bethesda progressed satisfactorily.

(12) After 5 years of occupancy and 12,000 patient admissions, the clinical center gave evidence that it is fulfilling its promise as a research facility.

APPROPRIATIONS REQUESTED

For 1960, appropriations are requested to continue operations at the level of the 1959 appropriations, except for a reduction from \$30 million to \$20 million for research construction grants. Individual program directors will discuss their 1960 program plans.

RESEARCH ON MEDICAL SCHOOLS

Looking toward the future, NIH has just completed an intensive study of research needs and NIH support in 20 selected medical schools. Preliminary results and other data reveal trends toward increasingly productive medical research through attention to the broader needs of institutions, stronger training programs, collaborative studies, freedom of inquiry, better communications, and balanced research support. Substantive trends may bring extensions of physical biology, behavioral sciences, epidemiology, environmental health studies, and probings into the secrets of the cell.

Senator HILL. Is this study available for distribution?

Dr. SHANNON. We have a copy that was delivered to me by Dr. Endicott. This contains the recommendations of the study staff, and is a complete report. We have not yet decided on the final disposition, but the study is complete and available.

Senator HILL. We would very much like to have a copy for this committee. About how many pages is it?

Dr. SHANNON. It is about 35 pages. It contains a considerable amount of tabular data.

Senator HILL. We would very much like to have that study and may want to put it in the record or have it published as a separate document. Certainly, I think the results of that study ought to be available to the committee and to the Congress and to other interested parties.

(The report referred to was filed with the committee.)

Dr. SHANNON. We feel the study is a key document in our exploration of the needs, both present and future, for research and research training support in the medical schools of the country. Although it is limited to 20 schools, half of them are State schools, and half of them private schools, our other information indicates that the 20 schools reflect the general trend of needs in our entire academic environment. We feel the report contains very important information in considering the further development of our programs. I should be glad to make the report available.

Senator HILL. That is fine. We appreciate it, Doctor.

THE EFFECT OF THE HOUSE ACTION

Dr. SHANNON. The House of Representatives, acting on the 1960 appropriations for the Department of Health, Education, and Welfare, increased the President's budget by \$50 million from \$294 million to \$344 million, for the eight appropriations for operating programs administered by the National Institutes of Health. In addi-

tion, the appropriation for construction of health research facilities was increased by the House from \$20 million to \$30 million.

As the Secretary indicated in his testimony last week before this committee, these increases are contrary to the fiscal policy of the President.

USE OF INCREASES

The following information is provided at your request to explain how these increases would be used, if enacted.

(1) Research grants: There will be an increase of \$29,717,000. The increase voted by the House of Representatives would be used for the support of a greater proportion of the research grant applications which are expected to be recommended by the Advisory Council in 1960.

It should be noted that in its action the House continued the limitation on the payment of indirect costs (overhead) at 15 percent on research project grants.

Senator HILL. Doctor, in that connection, what was the recommendation of the Department on that 15 percent?

LIMITATION ON INDIRECT COSTS

Dr. SHANNON. The recommendation from the Department was that the limitation of 15 percent be removed. Its intent was to go to full indirect costs perhaps with an upper limitation of 25 percent.

What would this have cost, Dr. Van Slyke?

Dr. VAN SLYKE. \$12,400,000 on the 1959 program level.

Senator HILL. You mean that would be an additional cost? If you went from 15 to 25 percent there would be an additional cost in that amount?

Dr. SHANNON. Contained in the overall cost, there would be \$12.4 million or \$12.5 million devoted to the increased payments of overhead on the 1959 program level.

Senator HILL. Then the increase of \$29,717,000 by the House, raising the limit of 15 to 25 percent and taking that \$12.4 million off, it would come out of \$29,717,000?

Dr. SHANNON. That is correct.

Senator HILL. All right.

Dr. VAN SLYKE. May I comment there, please, sir? The 25 percent is an average figure. The request of the Department was for a provision for full indirect costs which would average 25 percent.

TRAINING GRANTS AND AWARDS

Dr. SHANNON. Continuing with my statement:

(2) Training grants and awards: This would be increased \$13,372,000. This increase would be used primarily to increase the output of scientists trained for research and academic careers in the basic medical sciences (biochemistry, pharmacology, physiology, genetics) and to strengthen training programs in areas of clinical investigation where recognized shortages exist. The emphasis here is on postgraduate training for research, with special attention given to increasing the number of individuals receiving senior research fellowships which permit their gradual absorption into the faculty of medical and related institutions.

Senator HILL. Doctor, in that connection, there is no difficulty involved in getting applications for traineeships where you have the funds available. Is that true?

Dr. SHANNON. That is correct, sir. This has been a very important program, and I do not believe we would have the sound medical research base we have today, were it not for the support of this program over the years.

Senator HILL. You mean this traineeship program to train these men to do this work?

Dr. SHANNON. Traineeships themselves and the provision of training grant funds which they accompany. It is really a combination of the two.

DIRECT RESEARCH

(3) Direct research: We have an increase of \$2,525,000 here. A portion of the House increases it is calculated would be used for mandatory pay (wage board) and other increases in the cost of research at NIH's own laboratories at Bethesda, and in the field, for the provision of improved logistical supporting services in support of this research effort, and for costs associated with the activation of additional research space. I might say at this point the Biologics Standards Building becomes available during the next fiscal year. It was originally scheduled to be completed in November. It seems likely now that it will be completed by January 1.

The remainder would be used for such activities as: research in physical biology, the collaborative study (with St. Elizabeth's) of new drugs for the treatment of mental illness, the further development of the Middle American Research Unit (in Panama), and, finally, for the study of the possible role of viruses in the etiology of cancer. I am sure in this latter item, Dr. Heller may want to go into greater length, because this really, to my mind, constitutes a major breakthrough of the first order.

APPLICATION OF RESEARCH KNOWLEDGE

(4) Application of research knowledge: On this item there was an increase of \$3,587,000. The increase voted by the House, if enacted, would be used to extend the communication and application of knowledge through control, demonstration, and technical assistance programs, with special attention to tests for the early diagnosis of cancer and use of modern techniques for the care and treatment of the mentally ill.

Senator HILL. Could we have Dr. Felix and Dr. Heller address themselves to this item in more detail?

REVIEW OF GRANTS

Dr. SHANNON. I would hope so; yes, sir.

(5) Review of grants and general administration:

There was an increase of \$799,000 on this item. If the extramural programs were to be expanded based on appropriation increases voted by the House, it would be necessary to extend and strengthen the processes by which applications for support are reviewed and recommended for payment. The high standards of review and objective scientific appraisal are vital to the effectiveness of the entire support program and must be maintained.

Senator HILL. You have been very careful about that in the past, have you not?

NEED FOR CARE IN ADMINISTRATION

Dr. SHANNON. Yes, sir; we have been careful for two reasons: In the first place, a series of appropriations such as ours, which provides such a large share of the support of the medical research in the country, requires that they be administered with a high degree of intelligence, and with searching inquiry as to effectiveness. Secondly, in terms of individual programs; since the dollar value of this program is so large, we have to be as certain as is possible that each program is characterized by a high degree of excellence.

As you know, sir, this is determined not by ourselves in Bethesda, based on a bureaucratic judgment, but rather, in conjunction with the scientists of America. We have great faith in our type of review system. In point of fact, were we to attempt to obtain the type of scientific judgments that are brought to bear on our various programs and reimburse the scientists through direct employment, the cost would be fantastic.

CONSTRUCTION OF RESEARCH FACILITIES

Now, to continue my statement. Construction of research facilities: There has been voted by the House an increase of \$10 million. This would increase this program to its maximum authorized level of \$30 million. Recommended projects are available to utilize this increase.

Senator HILL. We have appropriated that amount each year since this program has started; is that not right?

Dr. SHANNON. That is correct.

Senator HILL. I asked Dr. Burney yesterday to supply us with a table which will show us the exact status of that program from day to day.

Dr. SHANNON. We reviewed this program because of its importance.

(7) Direct construction: The House disallowed a request of \$150,000 for construction of an animal facility at the Rocky Mountain Laboratory at Hamilton, Mont.

I would say, as a matter of professional judgment, the members of the NIH staff believe there is ample evidence that the increases voted by the House can be effectively utilized and meet demonstrable needs.

We recognize, however, that we cannot be fully conversant with all of the economic and other considerations which must go into the formulation and execution of a total budget for the Federal Government, and that the final action of the Congress and the President must take all such considerations into account.

RECOMMENDATION ON HOUSE INCREASES

For overall budgetary reasons, the Department has recommended that the increases over the President's budget be eliminated by the Senate.

Senator HILL. Well, Doctor, as you state, as a matter of professional judgment, the members of the NIH staff believe there is ample evi-

dence that the increases voted by the House can be effectively utilized and meet demonstrable needs?

Dr. SHANNON. Yes, sir.

CONSTRUCTION OF ANIMAL QUARTERS, HAMILTON, MONT.

APPROPRIATION ESTIMATE

“For the construction of quarters at the Rocky Mountain Laboratory, Hamilton, Mont., for small animals, \$150,000, to remain available until expended.”

Amounts available for obligation

	1959 appro- priation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	0	\$150,000	0

Obligations by activities

Description	1959 appropriation		1960 budget estimates		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Construction and equipment (total obli- gations).....	0	0	0	\$150,000	0	0

Obligations by objects

Object classification	1959 appro- priation	1960 budget estimate	1960 House allowance
10 Lands and structures.....	0	\$150,000	0

ROCKY MOUNTAIN LABORATORY

Senator HILL. Doctor, with reference to this Rocky Mountain Laboratory, I have a letter here from Senator Mansfield of Montana, written for himself and Senator Murray, as well, and amongst other things the letter states that the Montana congressional delegation is extremely concerned due to the fact this facility is needed and, in addition, the administration itself requested funds when they submitted the budget, et cetera.

Now, would you give us the story of the need for this laboratory?

Dr. SHANNON. Yes, sir. You may be interested in a general program analysis of the role played by the Rocky Mountain Laboratory in the general sphere of medical science in this country. This was prepared in the past 2 to 3 weeks at my request. I believe it outlines in fairly precise detail the rather unique position this laboratory holds in the Nation.

PREPARED STATEMENT

Senator HILL. We will include that report at this point in the record.

(The report referred to follows:)

SPECIAL REPORT: THE ROCKY MOUNTAIN LABORATORY, MAY 1959

LABORATORY MISSION

The Rocky Mountain Laboratory of the National Institute of Allergy and Infectious Diseases, established to study and bring under control the spotted fever which in the early years of the century plagued the Rocky Mountain area, continues to fulfill its responsibilities to the western region of the United States. It is a world center for research on rickettsial diseases including Q-fever; for work on Colorado tick fever which is important to the health of the people of the Western States; and for work on mosquito-borne diseases, such as western equine encephalitis, which are serious diseases that threaten both man and domestic animals.

The Hamilton, Mont., researchers are in a strategic position with regard to a number of fungus infections, including some that thrive in dry climate, such as the agent of coccidioidomycosis, which causes influenzalike symptoms and may result in lesions of the lung resembling those of tuberculosis. Histoplasmosis and other fungi are also under investigation.

Control of these, and indeed many diseases, rests on knowledge of ecology, epidemiology, pathogenesis, and immunology. Such knowledge can only be obtained from studies made in the region where a particular disease is prevalent. Examples of how the Rocky Mountain Laboratory scientists have contributed and are contributing to such fundamental knowledge can be found both in the laboratory's original achievement in conquering Rocky Mountain spotted fever and in current studies on Q-fever, Colorado tick fever, and the fungal diseases of the Western States.

Corollary to such studies are others now underway which have as their goal development of effective vaccines for prevention of infections in man and his domestic animals, or of better diagnostic and therapeutic agents. But the primary importance of the laboratory rests on its location which permits its scientists to observe at firsthand the natural reservoirs of diseases, their transmission in nature, and the point in a disease's natural cycle where interruption by man and his domestic animals results in spread of a disease to humans, cattle, sheep, and horses.

The Rocky Mountain Laboratory of the National Institute of Allergy and Infectious Diseases has evolved from the public health mission of a few men who, working in log cabins, an old wood shed, and an abandoned school building achieved the conquest of Rocky Mountain spotted fever. Today the laboratory is a modern \$2-million research outpost for the Northwest and the Nation.

The relative isolation of the Rocky Mountain Laboratory in the Bitterroot Valley of Montana is only geographic. Scientifically, this medical research institution is a world-renowned center for the study of rickettsial infections and other diseases endemic or epidemic in the Western States.

INTERNATIONAL CENTER

Since 1946, the International Northwest Conference on Diseases in Nature Communicable to Man has represented a scientific roundtable for assessing plans and progress against a host of infectious diseases of worldwide importance. In addition to participants from abroad, scientists from almost every State in the Union and several Provinces of Canada have attended this Conference. At the 13th annual meeting last year, held under auspices of the Rocky Mountain Laboratory, new findings on the severity of Colorado tick fever and the threat to public health of increased rodent populations in the Northwest were among the presentations.

Many of the diseases of special regional interest in the Northwest are also public health problems throughout the United States and abroad, although the ecology of these diseases is best studied in the western region where even the relative isolation may permit a sharper focus upon a specific problem.

ROCKY MOUNTAIN SPOTTED FEVER

The story of the conquest of spotted fever represents an important contribution by the Rocky Mountain Laboratory to public health progress and also illustrates how a seemingly provincial public health approach may turn out to be lifesaving for the Nation.

The first studies of spotted fever were begun in 1902 by Drs. L. B. Wilson and W. M. Chowning of the University of Minnesota, at the request of Dr. A. F. Longeway, secretary of the then newly created Montana State Board of Health. At that time spotted fever was known in other parts of the Rocky Mountain region, but in none of them was it as severe as in the Bitterroot Valley, where more than 80 percent of adults who contracted the disease died.

For several years following this initial research, other investigators studied the disease. One of them, Dr. Howard Taylor Ricketts, of the University of Chicago, carried on work in the Bitterroot Valley each spring from 1906 to 1908, and it was he who proved that the Rocky Mountain wood tick, *Dermacentor andersoni*, was the agent responsible for transmitting this disease to man.

Eventually it became apparent, however, that tick control measures alone would never solve the spotted fever problem. The Montana State Health Department and the U.S. Public Health Service brought their combined resources to bear upon this disease. Finally, an experimental vaccine was developed and proven effective through trials in large numbers of guinea pigs. Several investigators lost their lives in this work with the highly infectious rickettsial organism before adequate safety measures could be devised. Within a few years the output of vaccine rose from only enough to supply 4,000 persons at a cost of about \$20 per person to enough for 150,000 at a cost of about 75 cents per person. Finally, in line with Public Health Service policy, the laboratory turned over production of the vaccine to commercial manufacturers when such production became practical.

In 1930, spotted fever acquired prominence as a national problem when the first diagnosed case was reported in Pennsylvania. Within a few years it became apparent that the American dog tick, *Dermacentor variabilis*, could transmit the disease. From 1940 to 1950 more cases of this disease were reported in the States of Virginia, Maryland, and North Carolina than in all of the Western States combined. However, better diagnosis and early treatment with broad-spectrum antibiotics and use of vaccine by persons at special risk have greatly reduced the hazard.

The success of the Rocky Mountain Laboratory against spotted fever and the background of scientific information acquired during this work provided a beachhead for mounting an attack on a number of other disease problems, including tick and mosquito-borne infections for which animals are the reservoirs. The work of the laboratory reached out beyond the Bitterroot Valley to aid adjoining regions. The growing populations of the Western States found this a medical research center with a special emphasis upon their health security.

COLORADO TICK FEVER

The Rocky Mountain wood tick, *Dermacentor andersoni*, which transmits spotted fever, also is an intermediate host in carrying another animal infection to man—the virus of Colorado tick fever.

Several hundred cases are reported each year in the Western United States, including California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming. Visitors to these States have become infected. Outbreaks among residents have been sporadic, including sheepherders in areas of Nevada and Idaho, a group of Nevada college students, and the inhabitants of a monastery. About 1,000 human serums collected in Idaho, Wyoming, and Colorado were tested for the presence of antibodies against Colorado tick fever. Seven percent of the serums were found to possess antibodies, suggesting a surprisingly high incidence of infection, even for endemic rural areas.

The consequences of the fever are not always mild. A hemorrhagic tendency has been observed, virus has been isolated from the blood of cases with central nervous system involvement, and one fatal case has been encountered. No effective chemotherapeutic drug is available against this virus infection.

The Rocky Mountain Laboratory has devised efficient diagnostic tests for this disease, and the virus has been adapted to growth in tissue culture. A vaccine has been developed and proven effective through extensive animal trials. Arrangements have been made to use it experimentally in human volunteers.

Q-FEVER

Q-fever, one of the rickettsial diseases that has worldwide as well as regional importance, is receiving intensive study at Hamilton. The laboratory is conducting a nationwide epidemiological survey of Q-fever infections in animals and humans. State health departments and agricultural agencies are demon-

strating that the infection, which causes a wide range of pneumonia-like symptoms, is occurring in areas previously free of the disease.

The discovery of Q-fever in Wisconsin and its prevalence there are of particular concern because of this State exports large numbers of dairy cows and the disease could be spread to other areas through shipment of infected cattle. Man contracts the disease through occupational exposure to cattle and other livestock, residence near infected premises, or from household use of raw infected milk. The illness can be debilitating and sometimes develops into chronic disease.

The Q-fever situation in Ohio is similar to that of Wisconsin, but less advanced. Infections are also being reported by Mississippi, Louisiana, Iowa, Nebraska, North Carolina, and Virginia, and positive serum titers in veterinarians in Pennsylvania point to the presence of the disease in that State.

In the formentioned Q-fever survey, the Rocky Mountain Laboratory is serving as a focal point for receiving and evaluating reports from each of the States on the serological evidence of this infection in livestock and in humans. The laboratory is also assisting the State health departments and the agricultural agencies in performing tests of human, sheep, and bovine serums and of bovine milk samples to detect antibodies against the causating organism, *Coxiella burnetii*, employing a simple, rapid method developed by a scientist of the laboratory staff.

The laboratory plans to evaluate the data obtained from this coordinated, epidemiological survey, and to determine appropriate measures to be instituted for controlling the spread of Q-fever among livestock and preventing human infections.

TULAREMIA

While still working on spotted fever, scientists at the Rocky Mountain Laboratory found that tularemia sometimes is transmitted by ticks. Although this disease is not as severe as spotted fever, the illness is usually of long duration. It was also found that the tularemia bacterium may be present in streams polluted by infected cattle, sheep, and other animals.

Considerable work on this infection led to a number of discoveries and has pointed to the possibility of an improved vaccine for people who handle rabbit carcasses (which are the usual source of human infection) and others at special risk.

In relation to vaccine development, scientists at the laboratory found several years ago that protective fractions of the organisms causing tularemia, histoplasmosis, salmonellosis, and certain other diseases are wholly contained in the cell wall. They are working today on the tularemia bacterium and several other agents to purify the essential immunity-producing fraction and remove all useless or toxic substances. They are hopeful that this research may lead to development of greatly improved vaccines against tularemia and a wide variety of other infectious diseases. For example, a tuberculosis vaccine prepared by these methods is a definite possibility, and a project working toward this goal is underway in one of the units at the Rocky Mountain Laboratory.

EXPANDING NEEDS

With continuing expansion of the service of the Rocky Mountain Laboratory to the Western States and the Nation, animal experimentation, as used in the Colorado tick fever vaccine study and for other purposes, has increased materially. The Laboratory is an unusually self-sufficient research center because of its relatively isolated location, and animal production is one of the responsibilities it must assume.

Animals are needed to study the efficacy and safety of several of the prophylactic preparations under development at the Laboratory, and are also employed to study host factors in disease and to clarify a number of other biological phenomena related to human infections and, incidentally, to certain poultry and livestock diseases.

The rabbit skin test developed by the Rocky Mountain Laboratory as an index of the immunity produced by an experimental tuberculosis vaccine, for example, is a thousandfold more sensitive than previously employed mouse skin tests. The new method makes possible a more critical evaluation of minute fractions of purified protective material in the vaccine studies—but rabbits are relatively large animals, and these studies, which use hundreds of them, are among those now overtaxing the Laboratory animal facilities. Validity of scientific findings is, of course, dependent upon adequate quantitation of results.

Another means of correlating vaccine effectiveness in animals has also been developed in which mice are infected intranasally by a spray of tuberculosis organisms. After 10 days, lung sections are examined, and the presence or absence of organisms is an index of infection or of successful resistance produced under controlled conditions by experimental vaccines. Results are correlated with the other tests, providing a further check on reliability. These procedures, of course, have greatly increased the demands upon the mouse production facility.

The Rocky Mountain Laboratory, with its emphasis upon diseases often involving animals hosts, makes wider use of animal experimentation and has a higher degree of technical skill in this area than many other laboratories. This is the case, for example, in work on the natural history of tick-borne diseases such as the virus-caused Colorado tick fever. While laboratory mice are used in neutralization tests for diagnosing the disease, wild rodents, including ground squirrels, are trapped extensively in the search for reservoir hosts of the virus. These animals do not tax the animal production facilities of the Laboratory, but they employ space that otherwise might be improvised for animal production, although that is a make-shift and uneconomical alternative.

A large wooden building was built more than 10 years ago as a makeshift structure for mice breeding. Its inefficiency has been evident from cross-infections in the mouse colonies. The building is also inadequate for present day needs.

In the fact of expanding research programs, the laboratory until recently has been able to meet its minimum needs by great and costly exertion in using makeshift and temporary wood structures for breeding animals, in adapting laboratory space for animal rearing during periods of special emergency need, or in placing special orders for shipment of larger animals across country from NIH in Bethesda.

Animals provided by outside breeders do not always meet the standards of the researchers, and the individual producers cannot economically meet the changing needs of various units of the laboratory. Some have proved dependable, but this means of obtaining animals is very expensive in the overall. The increasing need has made these stop-gap arrangement unsatisfactory. Accordingly, plans have been drawn up for an adequate animal production facility.

The proposed building would be approximately 160 feet by 50 feet, cement slab, single story, cinder block or tile veneer of the simplest type and design and one which would afford the most space for the least money. Cost of the basic construction, including the essential mechanical and service installations such as cage-washing facilities needed in the operation of the building, is estimated at \$150,000. The utilities, including heat for the building, would be supplied by connection to the existing steam and power sources of the laboratory. The building would be constructed on land which belongs to the U.S. Government and is a part of the present 19-acre plot on which the Rocky Mountain Laboratory is located.

SPECIAL NEEDS OF PACIFIC NORTHWEST

Dr. SHANNON. Over the past half century it has served special needs of the Pacific Northwest, particularly those related to diseases transmitted by insects peculiar to the area. It has been outstandingly successful and is one of the Nation's, rather, one of the world's great laboratories. It continues to serve the needs of the Pacific Northwest, more particularly in the fields of tick-borne fevers. We feel that we should support it at an optimal level.

At the present time, the program is dependent on the extensive use of experimental animals. The animal quarters presently used are a series of wooden buildings, temporary in nature, built many years ago, which qualitatively are not suited to their current use, quite apart from size. They are not suited for proper temperature control or for the care of some of the animals that are needed in the current work.

The work now requires larger sized animals and this requires considerably more space. We feel it is tremendously important that this laboratory be given the opportunity to exploit fully the professional talents that are there, and this can only be done if they are given ade-

quate facilities and this in turn includes adequate quarters for animals. We are very enthusiastic in our endorsement of the project.

In point of fact, the Secretary and the Department also have endorsed this need. The need was also accepted by the Bureau of the Budget and submitted in the President's budget. The House action was not protested by the Secretary because, I believe, he felt he had to make a priority determination of what he should protest and what he should not, and he chose to give this a lesser priority than some of the other items.

Senator HILL. You recall this committee and the Senate last year voted \$150,000 for this laboratory, and it was not agreed to in conference. Now certainly if this money was needed last year it is needed more now, is it not?

Dr. SHANNON. I believe so; yes, sir.

Senator HILL. Are there any questions that you would like to ask, Senator Byrd?

Senator BYRD. No, thank you.

Senator HILL. Let me ask you this: How much of the job that is needed to be done there will \$150,000 do? I am speaking of the Rocky Mountain Laboratory.

Dr. SHANNON. I think that will satisfy the needs as far as we can project them for a 5 or 10-year period.

Senator HILL. It is important that we go ahead now and allow this money?

Dr. SHANNON. I hope so, Senator.

Senator HILL. You hope so?

Dr. SHANNON. Yes, sir.

NATIONAL HEALTH SURVEY

Senator HILL. Now, Doctor, for several years we have had work going on in reference to the National Health Survey. I think it has been cut down quite some bit from what was contemplated when we started that survey. I wish you would give us your views as to the importance of the survey, and particularly in connection with the NIH and the medical research programs.

Dr. SHANNON. Well, sir, I would be glad to talk to the importance of the survey as to our program, and you may wish to inquire as to the financing of it from Dr. Burney. It is contained in the office of the surgeon general. I can talk to the research point of view and would be glad to do so.

Senator HILL. All right; you talk to the research point and then I will be glad to have the comments of Dr. Burney.

Dr. SHANNON. Yes.

As we pointed out yesterday, in 1935-36 there was conducted the first and only health survey this country has had. The bulk of the medical programing on a national level since that time has been based upon projections arrived at from data collected then.

The present survey departs in many ways from the initial study.

In the first place, it has the advantage of bringing us up to date in our projections of needs and consequently the relative importance of very broad disease areas for the purpose of programing research, but it has this effect—

Senator HILL. Excuse me one minute.

Senator Byrd has just come in with our committee and he may not be quite as familiar with this as he would like to be. Could you just give us a summary of what you are doing?

Dr. SHANNON. Yes, sir.

SUMMARY OF WORK ON SURVEY

The national health survey is an attempt, on a statistically valid sampling procedure, to determine the ongoing health of our Nation.

Dr. BURNEY. May I inject one thing here?

Dr. J. D. Porterfield, the Deputy Surgeon General, and Dr. William Stewart, Chief, Division of Public Health Methods, who is in direct control of the program, are here, and they can supplement what Dr. Shannon says in discussing its relationship to the National Institutes of Health research planning and programing.

The actual operation of the Health Survey is under the immediate direction of our Dr. Stewart, and also we have Dr. Porterfield, the Deputy Surgeon General.

Dr. SHANNON. Then, for my part, Senator Hill, I will limit it to the assessment of the support of the NIH programs.

We feel a very serious responsibility, as you know, sir, in programing research for the future, so that the program emphasis is related in no small measure to the incidence of disease.

Up to the present time, the major information we have had has been derived from the mortality statistics, from hospital admissions, and from the health survey conducted in 1935-36.

Now the bulk of sickness in this country does not result in hospitalization, and certainly not in early death. The type of disability that prevents people from gainful employment, imposes home burdens, is essentially not discoverable without direct inquiry.

RESULTS OF PROPOSED SURVEY

Further, this survey would give us a continuing assessment, not only of the current disease problems, but as these disease problems change from year to year, and we feel the survey will be one of the more important programing devices we will use to determine where our programs shall go in the long run. We feel it is extraordinarily important.

Senator HILL. This gives you an overall health picture of the American people?

Dr. SHANNON. Yes, sir.

Senator HILL. And with that health picture you can better determine what your goals or points of destination shall be; is that right?

Dr. SHANNON. That is completely correct.

Senator HILL. All right, Dr. Porterfield, suppose you brief this. I think I have a pretty good idea, but I thought that Senator Byrd might be interested in having a picture of what this survey means.

Senator BYRD. Thank you, Mr. Chairman.

Dr. PORTERFIELD. Thank you, Mr. Chairman.

PROGRESS OF SURVEY

This is the third year of the National Health Survey in operation, and during that time we have gone far enough with the collection and

processing and analysis of data to have published the first 11 reports.

As has been said, this gives us current information for the first time in a considerable number of years, and has led us to correct certain assumptions we have made on the incidence and prevalence of certain disease and illness conditions in the United States and has also given us a better picture of the utilization of health manpower in this country.

For example, two specific things that we have discovered so far in the analysis of the data collected, are, first, a much higher incidence of personal injuries than we had ever expected and, secondly, something we had suspected for a long time, but which now we can demonstrate by facts, is the great shift in the use of a physician's time from home visits to office and hospital calls, which creates a different kind of need problem.

We are continuing to develop the kinds of information and the types of analyses which are being provided, from the collection of this data. Unfortunately, we are not able to answer all of the individual requests that come from the various parts of the country for special studies, and for special kinds of tests, either because it just is not possible in a survey of this magnitude, or for other reasons.

We have already, in the 11 published documents, exhausted some of our first printings, and have had to have more printed. A great many of these are sold by the Government Printing Office rather than being distributed free by the Government. They are used not only by other Federal agencies but by State and local governments and also by voluntary health agencies, by insurance companies, by almost everybody in the country interested in the present health picture.

Senator HILL. We have had a health interview survey, have we not?

Dr. PORTERFIELD. Yes, sir.

Senator HILL. And that is pretty well completed?

Dr. PORTERFIELD. That is going on very well.

HEALTH EXAMINATION SURVEY

Senator HILL. The next is the health examination survey.

Dr. PORTERFIELD. During the present year, sir, we have done, as a test run, three projects in the country as to health examination, to verify the results of our health interviews to see that the actual facts, as found by the examination, are as told in the interview; and these have been quite successful. We carried them out in different parts of the country and different types of places, city, county, and township. This, however, is all that we have done, and having demonstrated that, we have ended there.

Senator HILL. But it was never contemplated that you would terminate when you started the study, as I recall?

Dr. PORTERFIELD. No, sir. We would not have planned to do the test study if we had not expected at that time to carry out the health examination.

Senator HILL. Now, how much money was contemplated for this year for the next step? When I say "this year," I am talking about the coming fiscal year.

Dr. PORTERFIELD. For the health examination, you mean?

Senator HILL. Yes. Again, Mr. Kelly might have those figures more convenient to him.

ESTIMATES FOR 1960 FOR SURVEY

Mr. KELLY. Mr. Chairman, in the appropriations for "Salaries and expenses, Public Health Service" one of the activities is "Public health methods and reports," and the preponderance of the cost under that activity related to the health survey.

This year we have \$2,080,000 in the budget and in the President's budget, \$2,069,000.

However, the original request of the Public Health Service to the Department was for \$2,439,000 and that is the amount which was posted in the preliminary submission to the Budget Bureau, and in the final submission to the Budget Bureau, there was about \$370,000 that was deleted, and that was in the final submission to the Congress.

Senator HILL. In this next step, as I understand from what you say, Mr. Kelly, you will have to have the additional \$370,000?

Mr. KELLY. I think the preponderance of it is for that purpose.

Senator HILL. Certainly that was the contemplation when we authorized this survey, that we would not just take one step and stop, but continue the thing and take the next step and continue to go forward.

Is there something that you would like to add to that, Dr. Burney?

NO SURVEY SINCE 1936

Dr. BURNEY. I think, in line with your comments yesterday, to provide a brief historical background, the last such survey of the health needs of the country was done back in 1935 and 1936. It was known as the national health survey, I believe, at that time.

Nothing has been done since, except on a spotty basis, so certainly since Congress enacted this bill about 3 years ago it was a very timely step to give to us, and when I say "us," I mean the whole country, the incidence, that is, the new occurrence of the diseases and disabilities in the country, and the prevalence, and by "prevalence" we mean those that already exist throughout the country, on a continuing basis.

METHOD OF SURVEY

We do this by sampling, using the Bureau of the Census and using their household interviewers to determine what illnesses these households have had in the past month, how many doctor's calls they had, and how many times they have been in the hospital, and that sort of thing.

Then this information is of interest and concern in planning research programs, whether it is ours or a university's or some other research agency's, in planning the community services which will meet the needs as demonstrated by this survey, and also in determining the organization or rather in helping to determine the type of organizational services in communities that are desirable to meet the needs, as the people have stated in their surveys.

For example, there is the matter I brought up yesterday of more home care services and the desirability of trying to fill in the gaps,

by communities, as to what the needs are. We have an advisory committee composed of medical individuals, people from insurance, industry, from voluntary health agencies, and we find a tremendous amount of interest in this and a demand for these reports from these studies.

Senator HILL. And I would think that this information would also be a bit valuable to your local county health boards or State health departments and to your own medical associations, and to doctors, generally, and also to your hospitals—to all people, as a matter of fact, in the field of health.

Dr. BURNEY. Dr. Stewart might have something to add.

Senator HILL. Do you have anything to add, Dr. Stewart?

Dr. STEWART. I would like to point out that the health survey going on now is the interview survey.

This is one way of doing it. The other way is examination, and they are obtaining two different kinds of information. The interview is limited to what people can tell about themselves, whereas examination is what a physician finds, and this is the difference between the two.

Senator HILL. Is there anything else you would like to add to this, Dr. Shannon?

Dr. SHANNON. No, sir.

GENERAL OFFICE BUILDING

Senator HILL. Doctor, another thing I want to ask you about is the general office building.

You know, this committee has been very much interested in that building. What is the exact status of it now? Are the funds sufficient to erect the building that was contemplated and that we had in mind for you?

Dr. SHANNON. If you wish, I can give you a detailed statement of precisely where we are, for the purposes of the record.

Senator HILL. That is all right.

Dr. SHANNON. But, in summary, the office building is finally going along very well on schedule. The drawings are essentially complete as of today. We will advertise for bids around about the first of June. As to the opening of bids, this is a rather large building and there will have to be a fairly extensive time for study. The bids will be opened, on the 14th of July.

We would hope that notice to proceed after the contract is awarded would be about 30 days thereafter. Being a fairly large and complex building, we anticipate it will require approximately 2 years for construction. That will give us the total facility about August 31, 1961.

RISE IN COST OF AIR CONDITIONING

Now we have only run into one difficulty, and that is that the dental building, and the building for the division of biologics standards, as well as the office building, have had their estimates on air conditioning upped by the architect since the original plans were drawn; in the office building the increase is about 50 percent. This would mean that some time prior to the completion of the building we will have to request additional funds to do two things: one is to satisfy the deficiency that will then be present in the air-conditioning equip-

ment and the second to provide a certain minimum in the way of standby equipment. With a facility as complex as that, to run without standby equipment, is a rather hazardous procedure. We have discussed this with the Department, and I believe we have their support at this time, to proceed with the preparation of the request for additional funds, and I believe, Mr. Kelly, this amounts to \$780,000 to be needed sometime prior to the completion of that building.

TIME OF AVAILABILITY OF FUNDS

Senator HILL. Do you know when that money will have to be made available to meet the need? You know, sometimes you wait too long and then it only costs you more in the end, as you well know.

Dr. SHANNON. I will have to defer that question to Mr. Seggel.

Mr. SEGSEL. It would have to be made available some time during fiscal 1960.

Senator HILL. You mean then that if it were available within a year from now, that would be all right? In other words, you know, sometimes when you wait you might have a sad experience. We just had a very sad experience over here with a building called the Senate Office Building, and I know that it costs more money if you do not do the job right in the first place.

Mr. KELLY. Senator, as Dr. Shannon indicated, that request is actually pending in my office now, and the question really is whether or not it should be submitted with the next supplemental request that comes up during this session of Congress or whether or not it can wait until January; but, in any event, it would have to come up to you at least in January, so it could be acted upon during fiscal 1960, and hopefully, in the early part of the next session.

Senator HILL. All right, Doctor. Is there anything else you would like to add to that?

Dr. SHANNON. No, thank you, sir. I believe we have had an extraordinarily profitable year, one that to all of us in Bethesda has been an exciting one and I believe that the programs really show the type of promise we want and desire, and I thank you so much for your support.

Senator HILL. Well, when you are thanking me you are thanking the whole committee because, as you know, you have the support of this whole committee, and we are very much interested and very much gratified for the very fine work you are doing, and have been doing.

Is there anything that you would like to add to this, Dr. Burney?

Dr. BURNEY. I would just like to say that we are very proud of the National Institutes of Health, and of the very fine direction they have been able to give to their own research program, and, as Dr. Shannon mentioned, without interfering with the freedom of the scientists in this country, the methods of the study sections, of the Councils, and the leading scientists of the country, and it has enabled us to administer the funds the Congress appropriated without infringing upon the educational and scientific rights of the individual scientists and institutions.

Senator HILL. I think that has been one of the most significant, outstanding things about that program.

Dr. BURNEY. Yes, sir; it has.

GENERAL RESEARCH AND SERVICES, NATIONAL INSTITUTES OF HEALTH

STATEMENT OF DR. G. HALSEY HUNT, CHIEF, DIVISION OF GENERAL MEDICAL SCIENCES; ACCOMPANIED BY DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For the activities of the National Institute of Health, not otherwise provided for, including research fellowships and grants for research projects and training grants pursuant to section 301 of the Act; regulation and preparation of biologic products, and conduct of research related thereto; and grants of therapeutic and chemical substances for demonstrations and research; \$28,974,000: *Provided*, That funds advanced to the National Institutes of Health management fund from appropriations included in this Act shall be available for purchase of not to exceed [nineteen] *fifteen* passenger motor vehicles[, of which fourteen shall be] for replacement only; not to exceed \$2,500 for entertainment of visiting scientists when specifically approved by the Surgeon General; and erection of temporary structures: *Provided further*, That all [funds herein appropriated which are expended under any provision of the Act in connection with any] *appropriations made to the Public Health Service in this Act and available for research or training [project] projects*, may be expended pursuant to contracts made on a cost or other basis for supplies and services [by negotiation, without regard to section 3709 of the Revised Statutes], including indemnification of contractors to the extent and subject to the limitations provided in title 10, United States Code, section 2354, except that approval and certification required thereby shall be by the Surgeon General."

Amounts available for obligation

	1959 appropriation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$28, 974, 000	\$28, 974, 000	\$36, 404, 000
Total obligations.....	28, 974, 000	28, 974, 000	36. 404, 000

Obligations by activities

Description	1959 appropriation		1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount	Positions	Amount
1. Grants:						
(a) Research projects.....		\$16, 621, 000		\$16, 125, 000		\$18, 959, 000
(b) Research fellowships.....		3, 260, 000		3, 260, 000		4, 560, 000
(c) Training.....		6, 040, 000		6, 040, 000		9, 040, 000
2. Direct operations:						
(a) Biologics standards.....	205	2, 236, 000	205	2, 694, 000	215	2, 805, 000
(b) Review and approval of grants.....	63	817, 000	63	855, 000	71	1, 040, 000
Total obligations.....	268	28, 974, 000	268	28, 974, 000	286	36, 404, 000

Obligations by objects

Object classification	1959 appro- piation	1960 budget estimate	1960 House allowance
Total number of permanent positions.....	268	268	286
Full-time equivalent of all other positions.....	4	4	4
Average number of all employees.....	246	251	276
Number of employees at end of year.....	284	284	302
01 Personal services.....	\$1, 512, 300	\$1, 548, 300	\$1, 677, 800
02 Travel.....	59, 700	59, 700	73, 200
03 Transportation of things.....	10, 000	10, 000	11, 000
04 Communication services.....	19, 000	18, 200	18, 200
05 Rents and utility services.....	500	500	500
06 Printing and reproduction.....	4, 000	4, 000	4, 000
07 Other contractual services.....	34, 000	22, 800	30, 300
Reimbursement to "National Institutes of Health management fund".....	828, 000	866, 000	962, 000
08 Supplies and materials.....	508, 800	505, 800	541, 100
09 Equipment.....	38, 000	473, 000	477, 700
11 Grants, subsidies, and contributions.....	25, 876, 000	25, 380, 000	32, 514, 000
Contribution to retirement fund.....	81, 000	82, 800	91, 300
15 Taxes and assessments.....	4, 500	4, 700	4, 700
Subtotal.....	28, 975, 800	28, 975, 800	36, 405, 800
Deduct quarters and subsistence charges.....	1, 800	1, 800	1, 800
Total obligations.....	28, 974, 000	28, 974, 000	36, 404, 000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	268	\$28, 974, 000
1960 appropriation request.....	268	28, 974, 000
Net change requested.....	0	0

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Decreases:				
Nonrecurring miscellaneous other objects.....		\$34, 000		\$34, 000
Reduction in research projects.....		496, 000		496, 000
Subtotal decreases.....		530, 000		530, 000
Increases:				
For mandatory items:				
Extra day of pay (261 days in 1959 and 262 days in 1960).....		5, 200		5, 200
Annualization of 45 new positions in review and approval for part of year and related other objects.....		32, 800		84, 400
Subtotal mandatory increases.....		38, 000		89, 600
For program items:				
Equipment and moving costs for the biologics standards program.....		454, 000		454, 000
Research projects in fundamental medical and bi- ological research, research in problems of public health, and research in aging.....				2, 834, 000
Research fellowships:				
Senior fellowships.....				500, 000
Regular, special, and part time.....				800, 000
Training in the areas of basic biological, medical, and health-related sciences and other specialty areas.....				3, 000, 000
Cost of increased review and approval services.....			8	68, 400
Servicing of new building and licensing and in- specting of biologicals.....			10	36, 000
Blood for transfusions in Clinical Center and geno- typing of bloods including sera.....				16, 000
Professional training and verbatim reporting.....				13, 000
Physical standards used in control of biological products.....				15, 000
Net change in reimbursement to "National Insti- tutes of Health management fund".....		38, 000		134, 000
Subtotal, program increases.....		492, 000	18	7, 870, 400
Total change requested.....		0	18	7, 430, 000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$7,430,000 for "General research and services, National Institutes of Health." As the Secretary indicated this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Activity No. 1(a)—Research projects

The full amount requested of \$16,125,000 was allowed by the House, plus an additional \$2,834,000 which will be utilized to support research in fundamental medical and biological research, research in problems of public health, and research in aging. This amount of \$18,950,000 is an increase of \$2,338,000 over the 1959 appropriation.

Activity No. 1(b)—Research fellowships

The full amount requested of \$3,260,000 was allowed by the House, plus an additional \$1,300,000 which will be utilized in full-time regular research fellowships and postsophomore fellowships.

Activity No. 1(c)—Training

The full amount requested of \$6,040,000 was allowed by the House, plus an additional \$3 million which will be utilized to support training in the areas of basic biological, medical, and health-related sciences and in other specialty areas where acute shortages of research-trained manpower exist.

Activity No. 2(a)—Biologics standards

The full amount requested of \$2,694,000 and 205 positions was allowed by the House, plus an additional \$111,000 and 10 positions which will be utilized to employ additional staff for servicing the new building and for licensing and inspecting biologicals, bloods for transfusions in the Clinical Center and genotyping of bloods including sera, physical standards used in control of biological products, professional training and verbatim reporting, and a proportionate share for centrally furnished services. This amount of \$2,805,000 is an increase of \$569,000 over the 1959 appropriation.

Activity No. 2(b)—Review and approval of grants

The full amount requested of \$855,000 and 63 positions was allowed by the House, plus an additional \$185,000 and 8 positions which will be used to employ additional professional and clerical staff required for the grants program and their proportionate share for centrally furnished services. This amount of \$1,640,000 is an increase of \$223,000 over the 1959 appropriation.

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

PREPARED STATEMENT

Senator HILL. Next we will have Dr. Hunt, who will testify concerning the "General research and services." We are glad to have you here with us this morning, sir.

Dr. HUNT. Thank you, Senator.

Senator HILL. Do you have a prepared statement?

Dr. HUNT. We have a statement which I shall be glad to summarize, if you wish.

Senator HILL. All right. Summarize your statement and your full statement will appear in the record.

(The statement referred to follows:)

STATEMENT OF CHIEF, DIVISION OF GENERAL MEDICAL SCIENCES, NATIONAL INSTITUTES OF HEALTH ON GENERAL RESEARCH AND SERVICES, PUBLIC HEALTH SERVICE

Mr. Chairman and members of the committee: I am pleased to appear before you for the first time on behalf of the research and training grants portion of the "General research and services" appropriation, which constitutes the

1960 program proposals of the newly created Division of General Medical Sciences. The other major division included in this appropriation, the Division of Biologics Standards, has been discussed by the Director, National Institutes of Health in his opening statement.

On July 16, 1958, Secretary Folsom approved the establishment of the Division of General Medical Sciences. The new Division administers the National Institutes of Health program of noncategorical research and training grants, provides fellowships for general research training, conducts studies and promotes research relating to general medical research and training needs, and directs the Center for Aging Research at the National Institutes of Health.

The nucleus of this new Division is comprised of the general research and training programs transferred from the Division of Research Grants, and the Center for Aging Research transferred from the National Heart Institute.

The Division was established to provide a new organizational framework for the conduct and continued development of basic noncategorical research, training, and fellowship programs encompassing general medicine, public health, aging, and clinical and preclinical sciences supported through the "General research and services" appropriation. The budget for these grant programs has grown from a level of \$5 million in 1956 to a total of \$25,921,000 in 1959. The total proposed in the President's budget for 1960, \$25,425,000, is \$496,000 less than the 1959 obligation plan. These programs will support developmental and exploratory research and training activities in the basic sciences and in problems of public health and medical care services. These are areas of growing importance which cannot be adequately developed through the disease-oriented categorical programs of the Institutes. As research programs in these basic areas develop to the point of having importance for specific disease entities, support for them is in many cases assumed by the categorical Institutes.

The Division also provides a center for the coordination of research and training activities directed toward broad cross-categorical problems, such as fostering research and training on aging through the Center for Aging Research.

During 1959, the research and training grants of a noncategorical nature are being greatly expanded, thanks to the interest of this committee and the Congress. The backlog of approved research grants applications in the general area which has existed for several years has been substantially reduced, the senior and foreign fellowship programs are being accelerated; and the increases appropriated for the general research training program are serving to stimulate and expand the training programs in the areas of basic biological, medical, and health related sciences, and in other specialty areas where acute shortages of research-trained manpower exist.

I should like to present in more detail some of the aspects of our program to illustrate our current activities.

RESEARCH GRANTS

The research projects supported by the Division of General Medical Sciences are for those areas that are not covered by any of the programs oriented toward specific kinds of disease process. They include fundamental medical and biological research, research in problems of public health, including environmental health, and research in aging.

The progress we make in clinical and applied medical research ultimately depends on the fundamental investigations in basic areas. The findings and observations of scientists supported in part by general, noncategorical research grants have added significantly to the sum of knowledge necessary to the later solution of problems related to disease processes.

A good example of how such a grant has led to important findings in a fundamental area is reflected in the isotope studies of Drs. P. D. Boyer and M. P. Stulberg at the University of Minnesota. By tracing the metabolic pathway of isotopically labeled amino acids in bacteria, they have discovered new clues as to how these substances become the "building blocks" of protein. These grantees have used a new approach to the important problem of how cells synthesize proteins. By feeding isotopically labeled amino acids to bacteria, they have been able to deduce important information about the pathway of incorporation of amino acid into protein by measurement of what happens to oxygen atoms that are lost from amino acids when protein is made.

Another example is the work of a group of the Division of General Medical Sciences grantees at the University of Missouri who are studying a food problem that currently presents a dilemma.

Cyclical shortages of food and high costs of spoilage make it necessary to investigate extensively those methods that increase the "shelf life" of perishable foods. Recently, much experimental study has revealed antibiotics to be highly successful agents for food preservation. Although this promises to be a solution to the problem of how to retard food decay, it presents possible public health hazards such as the emergence of resistant organisms which are potentially pathogenic for human beings.

In a series of papers the grantees have demonstrated that one commonly used antibiotic, streptomycin, retains its activity after being cooked, that another antibiotic, oxytetracycline, can be detected in cabbage even after being processed to coleslaw, and that animals fed streptomycin residue harbor streptomycin-resistant coliform bacteria.

The possible health hazards due to the emergence of antibiotic-resistant microorganisms resulting from antibiotic preservatives are a matter of concern not only to the Federal Government but among those who seek to extend the use of antibiotics to preservation of many other perishable foods.

A substantial increase in general research grant funds was appropriated in 1959 to reduce the backlog of approved applications which has existed for many years. These additional funds will increase the number of grants in this area from 713 in 1958 to approximately 1,100 in 1959. The 1960 increases will bring the total number of grants supported to approximately 1,150.

TRAINING GRANTS

Lack of research-trained manpower is a limiting factor in the conquest of diseases and the accumulation of new knowledge in the basic medical and biological fields. Unless this paramount challenge is successfully met in the near future, the pace of research in these fields as well as in clinical medicine will be materially hampered. The general research training grant program has the primary responsibility for stimulation and expansion of research training in all fundamental sciences related to medicine and health and in other special areas not appropriately the concern of the categorical Institutes.

For a number of years, outstanding medical educators and other members of the scientific community have warned that markedly increased numbers of younger scientists and physicians must be interested in and trained for careers in all branches of academic medicine and biology if we are to keep up the current pace of research and suitably staff our research institutions and new medical schools.

The increase from \$2,962,000 in 1958 to \$6,040,000 in 1959 has served to stimulate and expand this program in the areas of basic biological, medical, and health related sciences by assisting in the establishment, expansion, and improvement of training programs in universities and other research institutions.

Experimental training grant program

The experimental training grant program has permitted 13 of our foremost medical schools to establish experimental training programs. These grants aid the schools in the various means of identifying and giving special research training to selected, highly motivated medical students to stimulate their interest in medical research and careers in academic medicine. The experimental training grant program was started in 1957. The \$500,000 requested for 1960 will permit the continuance of these training grants.

Training grants in basic medical and biological disciplines

By the close of 1959, 170 research training programs will have been established, an increase of 95 over 1958. These programs provide good geographical dispersion and timely support for several unique research training facilities. In addition to making training available to more students, the new training programs also serve to increase the rate of production of trained personnel. A factor contributing to the present shortage of trained personnel is the extended time required to complete graduate studies. In order to support themselves, students must work as part-time research or teaching assistants, and thus must spread their graduate studies over 5 to 7 years. The support offered by stipends will cut this time to 3 to 4 years. In addition, the accelerated turnover will free the much needed space and facilities for the use of other students.

Six new training grant committees will review and evaluate training grant applications in many basic science areas, including anatomy, genetics, biochemistry, pathology, pharmacology, and physiology.

RESEARCH FELLOWSHIPS

The research fellowship program of awards to individuals is complementary to the training grant awards to institutions. It is anticipated that support for 1960 will continue at the 1959 level of \$3,260,000. Five major areas are provided for in the program:

(1) *Regular research fellowships*.—These awards are for the research training on a full-time basis of scientists at the predoctoral, postdoctoral, and special levels, for careers in the fundamental fields of the biological sciences such as genetics, biochemistry and physiology.

Predoctoral research fellowships emphasize research training in fundamental biological fields from which research findings serve to advance these sciences generally and may have application to specific diseases or categorical fields. Postdoctoral research fellowships are awarded to selected, promising holders of the Ph. D., D. Sc., D.D.S., M.D., and D.P.H. degrees who are interested in undertaking advanced research training related to a career in the health sciences. Special research fellowships are awarded to accomplished researchers who require further training or knowledge of new techniques or disciplines in order to increase their research productivity and to broaden their fields of scientific interest.

In 1958, 67 regular fellowships were awarded, approximately 35 will be awarded in 1959, and the program is planned to continue at approximately the same level in 1960. The decrease in regular fellowships was made necessary by the expanded program in foreign fellowships.

(2) *Postsophomore research fellowships*.—Through these grants, superior medical and dental students have an opportunity to obtain 1 to 3 years of research training prior to completion of their professional degrees. In general, these fellowships are awarded to candidates at the natural break between their preclinical and clinical course work. In 1958, 117 postsophomore fellows were awarded and 131 are being awarded in 1959. The program for 1960 is projected at the same level as that for 1959.

(3) *Fellowships for scientists in other countries*.—These fellowships are designed to develop more extensive and effective international exchanges of people and ideas in the medical and biological sciences. The number of postdoctoral fellowships was increased from 17 during 1958 to 38 fellowships representing expenditures of \$345,000 during 1959. The 1960 program is expected to continue at this level.

Recipients of these fellowships are encouraged to spend a short time at the National Institutes of Health to become acquainted with our facilities and to give the National Institutes of Health the benefit of their technical competence. The remainder of their year's study is at an outstanding medical research center, thus providing the opportunity to exchange research ideas and techniques with outstanding scientists in the United States. The exchange of ideas, information, and points of view is mutually beneficial to our scientists and to those from other countries. It has the further benefit of giving foreign scientists a more realistic concept of the research and training conducted in this country.

(4) *Senior research fellowships*.—The senior research fellowships program is designed to help relieve the shortage of researchers and teachers in the preclinical departments of medical, dental, and public health schools. These awards provide an incentive to competent investigators to remain in research rather than to move into the more highly remunerative clinical fields.

The increase from \$1 million in 1958 to \$2 million in 1959 will increase the number of preclinical science investigators from 86 in 1958 to approximately 172 in 1959. In 1960, this program will continue at the 1959 level.

(5) *Part-time student fellowships*.—The early stimulation of research interest in promising students has proved to be the most fruitful method of promoting a continuous flow of highly motivated and selected recruits into the medical, public health, and nursing research fields. It serves to increase the number of full-time researchers in the related basic fields. In addition, it assures an increased number of physicians and others with research orientation who can better apply basic research findings on clinical levels.

In 1958, 340 students received part-time fellowship awards, and we plan to continue the program at the same level in 1959 and 1960.

THE CENTER FOR AGING RESEARCH

The Center for Aging Research was established in 1956 and administratively located in the National Heart Institute. In July 1958 this activity was transferred to the newly created Division of General Medical Sciences.

This group serves to stimulate and coordinate research and training in gerontology through both grants and direct research in this field by all of the Institutes. Total National Institutes of Health support of research projects classified as relating primarily to gerontology was \$2 million in calendar year 1958 and \$4,133,980 in 1959.

In addition to the large interdisciplinary research project in aging at the Duke University Medical School (which was reported to this committee last year) a second similar project was developed at the Albert Einstein College of Medicine with staff assistance from the Center for Aging Research. In April 1958 the Surgeon General formally awarded the \$2 million grant for this 5-year project, which is supported by the National Heart Institute, the National Institute of Mental Health, and the National Institute of Arthritis and Metabolic Diseases.

Since the study of aging is an area that embraces many disciplines, the multidisciplinary collaborative approach holds much promise. The center is actively encouraging and assisting high caliber researchers who are interested in the study of aging to organize and operate interdisciplinary programs in universities and medical schools. These programs cut across traditional departmental barriers and facilitate the exchange of information between individuals with different backgrounds.

The center plans to stimulate further inquiry into three broad areas :

(1) The behavioral and social sciences: Where individuals who are trained to conduct research on problems in these sciences will be encouraged to study the changing social structure and the place of the older individual. Also, the older worker's response to an increasingly complex technology should be assessed. Further, much more should be learned about the mental health aspects of retirement.

(2) The clinical sciences are confronted with the problem of chronic disease. Factors which predispose to the development of chronic disease as a result of aging must be sought. Methods which will allow an assessment of the degree of benefit a debilitated individual may receive from available rehabilitation procedures should be devised. Also, there is need for further investigation into how the cost of rehabilitation can best be met.

(3) The biological sciences during the past decade and a half have shifted research techniques in large measure from the microscopic to the submicroscopic level. Biochemists, biophysicists, and investigators in other disciplines will be urged to study age changes in matter and energy at the most basic levels, where the origins of the aging process must likely rest.

SUMMARY

The new Division of General Medical Sciences is pleased to report on the progress it has made in carrying on the basic noncategorical research, training, and fellowship programs during 1958. The transfer of these activities from the Division of Research Grants was made with no interruption to these programs during a period of rapid growth. The research activities of universities and other research institutions throughout the country have benefited from the Division's increased research grant program, and the backlog of approved grants has been reduced substantially for the first time in many years. There has been greatly increased activity in the training and fellowship programs which will enlarge the supply of research-trained manpower. It is our hope and expectation that the knowledge gained from basic research and from the increased numbers of better trained investigators ultimately will be reflected in better health for all people.

The Division of General Medical Sciences has given and will continue to give special attention to those areas recommended by this committee.

RESEARCH AND TRAINING GRANTS

Dr. HUNT. Mr. Chairman and members of the committee, this concerns the research and training grants portion of the general research

and services appropriation, which constitutes the 1960 program proposals of the newly created Division of General Medical Sciences.

The establishment of the Division was approved by Secretary Folsom on July 16, 1958. The Division provides a new organizational framework for administering the program of noncategorical research and training grants, providing fellowships for general research training, conducting studies and promoting research relative to general medical research and training needs, and directing the Center for Aging Research.

ESTIMATE 1960

The budget for these programs has grown from \$5 million in 1956 to \$25,425,000 proposed in the 1960 President's budget.

Programs will support new research and training in basic sciences, public health, and medical care—growing problems which cannot adequately be met through the disease-oriented categorical programs of the Institutes. The Division also provides a center for coordinating research and training activities in broad cross-categorical areas, such as aging.

PROJECTS SUPPORTED

The progress we make in clinical and applied medical research ultimately depends on fundamental research in basic areas. The findings and observations of scientists, supported in part by noncategorical research grants, have added significantly to the sum of knowledge necessary to the later solution of problems related to disease processes. It will be of interest to the committee that we are now supporting 11 research projects in foreign countries, including a \$300,000 grant to the World Health Organization, to investigate those areas in international health research which can be intensified and expanded.

Senator HILL. You may not have this offhand, but I would like to have it supplied for the record, and that is, a list of these 11 projects in the foreign countries.

Dr. SHANNON. Mr. Chairman, could we add to that the support from the other Institutes also, and that will give us a comprehensive picture?

Senator HILL. All right, give us a comprehensive picture. That would be fine. We would like to have that.

(The information referred to follows:)

FOREIGN GRANTS APPROVED FOR PAYMENT
CANADA

No.	Name	Address	Project title	Amount
A-1641(R1)	Dr. Hans Selye	Institute of Medicine, University of Montreal, Montreal, Canada.	Experimental morphology of skeletal structures.	\$34,500
A-2260	Dr. V. W. Adamkiewicz and Dr. T. F. Nogrady.	University of Montreal, Montreal, Canada.	Insulin sensitization to "anaphylactoid" inflammations.	9,211
A-2298	Dr. Fedor Bohatirchuk	University of Ottawa, Ottawa 2, Ontario, Canada.	Dynamics of bone aging	7,175
B-706(C4)	Dr. F. Clarke Fraser and Dr. J. D. Metrakos.	McGill University, Montreal, Canada.	Genetic factors in epilepsies	13,190
B-1756	Dr. Esau A. Hosein	do	Studies in neurophysiology with gamma butyrobetaine.	16,886
C-3106(C2) and (C2S1)	Dr. H. Gobind Khorana and Dr. Gordon M. Tener.	University of British Columbia, Vancouver 8, British Columbia, Canada.	Chemical and enzymatic studies of polynucleotides.	51,110
C-3596(C1)	Dr. J. H. Quastel	McGill-Montreal General Hospital Research Institute, Montreal, Province of Quebec, Canada.	Investigation of factors influencing absorption of carcinogens by isolated surviving intestine.	8,100
D-594(C1) and (C1S1)	Dr. Gordon Nikiforuk and Dr. Ralph C. Burgess.	Division of Dental Research, University of Toronto, Toronto, Canada.	Carbohydrate components in teeth	9,880
E-1155(C2)	Dr. A. S. West	Queens University, Ontario, Canada.	Reactions to insect bites—causes and effects	9,200
E-1322(C2) and (C2S1)	Dr. Bram Rose and Dr. Alec Sehon	McGill University, Royal Victoria Hospital, Montreal, Canada.	Hypersensitivity mechanisms in man	31,000
E-2085	Dr. Alec Sehon	McGill University, Montreal, Quebec.	Physicochemical studies of antigen-antibody systems.	16,000
E-2138	Dr. Donald Fairbairn	Macdonald College P.O., Province of Quebec, Canada.	Biochemistry and physiology of ascaris lumbricoles.	13,174
E-2320	Dr. A. W. A. Brown	University of Western Ontario, London, Ontario, Canada.	Studies on the insecticide resistance of mosquitoes.	10,000
E-2592	Dr. Louis Siminovitch, Dr. R. M. Kahari, and Dr. R. M. Kajioka.	University of Toronto, Toronto, Canada.	Studies on mammalian cells and viruses cultivated in vitro.	16,600
G-6178	Dr. Cyril V. Finnegan	University of British Columbia, Vancouver, British Columbia, Canada.	The differentiation of the hypomere in salamanders.	6,198
H-3238(C1)	Dr. Bruce Chown and Dr. H. H. Gunson.	Hospital for Sick Children, Toronto, Canada.	A study of the maternofetal barrier and of Rh immunization.	11,605
H-3638(C1)	Dr. Hans Selye	University of Montreal, Montreal, Canada.	The mechanism of acute infarctoid cardiopathy.	32,400
H-3783	Dr. C. P. Leblond and Dr. Y. Clermont.	McGill University, Montreal, Canada.	Influence of aging on various cell populations.	15,785
M-1475(C1)	Dr. Robert B. Malm	do	Specificity of physiological reactions to stress.	16,675
M-1794(C1)	Dr. R. A. Cleghorn and Dr. Hassen Azima.	do	Psychodynamic changes with pharmacotherapy.	13,225
H-2716(C3)	Dr. Eleanor M. Venning and Dr. Inge Drydenfurth.	do	Study of physiological mechanisms involved in the secretion of aldosterone.	18,683
M-2151	Dr. E. D. Wittkower and Dr. F. Kalz.	do	Psychopharmacology of psychosomatic skin disorders.	17,250

M-2455	Dr. D. O. Hebb	do	Studies of learning, perception, and motivation.	24,380
M-2664	Dr. Leon J. Kamin	McMaster University, Hamilton, Ontario, Canada.	Individual differences in conditioned suppression.	6,434
M-2741	Dr. A. H. Black	do	Conditioning under curare-like drugs.	11,385
FINLAND				
A-1725 (C1)	Dr. Olavi Branko	University of Helsinki, Helsinki, Finland.	Function of adrenal medulla.	\$9,200
E-1693	Dr. Bertel von Bonzdorff	Maria Hospital, Helsinki/Helsingfors, Finland.	Vitamin B ₁₂ deficiency in carriers of diphylobotrium latum.	6,500
C-2930 (C2)	Dr. Kai Setälä	University of Helsinki, Helsinki, Finland.	Mechanism of carcinogenesis in mice and rabbits.	13,050
ENGLAND				
E-1772 (C1)	Dr. Aaran Klug	Birbeck College, London, England	Molecular structure of viruses by X-ray diffraction.	\$21,000
E-1899	Dr. S. D. Elek and Dr. G. R. F. Hilson.	St. George's Hospital Medical School; University of London, London, England.	Study of serological relationship between human and rat leprosy bacilli.	4,000
E-652 (C3) and (C2)	Dr. A. J. King and Dr. A. A. Miles	Medical Research Council, Westminster, London, S.W.1.	The aetiology, diagnosis	25,000
A-2508	Dr. Marguerite Davis Clegg	University of Oxford, Oxford, England	Irradiation of single cells by a particle microbeams.	7,050
B-1810	Dr. M. H. Pirene and Dr. F. H. C. Marriott.	do	Vision and light quanta	14,161
C-3929 and C-3929 (S1)	Dr. Hans A. Krebs and Dr. David E. Hughes.	do	Fine structure and enzymology of bacterial organelles.	18,090
B-1233 (C1)	Dr. R. W. Ditchburn	Reading University, Berks, Great Britain.	Function of eye movements in relation to visual perception.	12,650
CY-3188 (C2)	Dr. Alexander Haddow	Institute of Cancer Research, Royal Cancer Hospital, London, England.	Cancer chemotherapy, with special reference to (a) small-molecular physiological and metabolic antagonists; (b) enzymatic regulation of growth.	150,000
A-2791	Sir Lawrence Bragg and Dr. J. C. Kendrew.	The Royal Institution of Great Britain, London, W. 1, England.	Structures of biological molecules	32,520
RG-5804	Dr. Guido Pontecorvo	University of Glasgow, Glasgow W. 2, Scotland.	Genetic analysis of man based on mitotic segregation.	45,000
A-1982	Dr. Brian Spencer and Dr. K. S. Dodgson.	University of Wales, Cardiff, Glam, Great Britain.	The metabolism of sulfated mucopolysaccharides	8,629

FOREIGN GRANTS APPROVED FOR PAYMENT—Continued

FRANCE

No.	Name	Address	Project title	Amount
CY-3073(C2)	Dr. Bernard Pullman	Faculte des Sciences des Paris Laboratoire de Chimie Theorique, Paris, France.	Electronic structure of molecules and chemotherapy of cancer.	\$4, 910
E-2235	Dr. Charles Chany	University of Paris, Paris, France	Virus infection in utero, in the neonatal period and in infancy, with emphasis on human salivary gland virus.	11, 597
B-1857	Dr. Antoine Remond	Paris Medical School, Paris, France.	Human craniocerebral electropopographical developments.	18, 000
C-524(C10)	Dr. A. Lacassagne	Pasteur Institute, Paris, France	Theoretical and experimental study of the mechanism of carcinogenesis by conjugated molecules.	15, 566
C-3065(C1)	Dr. Carl Moser	Laboratoire Pasteur, Institut de Radium, Paris, France.	Theoretical investigations on carcinogenesis	30, 000
A-2773	Dr. Georges Schapira and Dr. Jacques Kruh.	Laboratoire de Recherches de Biochimie Medicale Hopital des Enfants-Malades, Paris, France.	Metabolic heterogeneity of hemoglobins	10, 000
RG-6016	Dr. Jean-Claude Dreyfus	do.		
C-4040	Dr. W. Bernhard, Dr. Francoise Haguenaud, Dr. N. Guillaud, and Dr. R. Cramer.	Institut de Recherches sur le Cancer, Villejuis (Seine), France.	Researches on the dynamic state of proteins and Ultrastructure of malignant cells	10, 000 5, 000

DENMARK

E-1741(C1)	Dr. J. Chr. Siim	State Serum Institute, Copenhagen, Denmark.	Studies on acquired toxoplasmosis	\$6, 077
C-948(C10)	Dr. Tage Kemp and Dr. Bent Harvald	University Institute of Human Genetics, Copenhagen, Denmark.	Heredity in cancer elucidated by a study of unselected twins.	8, 602
C-3087(C2)	Dr. Johannes Clemmesen	Finsen Institute and Radium Hospital, Copenhagen, Denmark.	Danish and international statistical cancer review.	6, 180
E-2547	Dr. Stephen V. Boyden and Dr. Ernst Sorkin.	Tuberculosis Immunization Research Centre, Copenhagen, Denmark.	Detection of antibodies in tuberculin allergy	13, 455
E-2321	Dr. J. Keiding	Government Pest Control Laboratory, Copenhagen, Denmark.	Reversal of DDT-resistance in houseflies	5, 000
D-843	Dr. Arne Bjork and Dr. Hugo Lager	The Royal Dental College, Copenhagen, Denmark.	Facial growth studies with metallic implants	5, 500
D-842	Dr. Knud Dreyer Jorgensen and Dr. Aaron S. Posner.	do.	Crystallographic study of dental gypsum	3, 800

SWITZERLAND

B-1916.....	Dr. R. Fankhauser.....	University of Bern, Bern, Switzerland.....	A study of spontaneous nervous diseases in animals.	\$5, 200
M-1561 (C1).....	Dr. T. Rabinowicz.....	Institut d'Anatomie Pathologique, Lausanne, Switzerland.	The prenatal development of the human cerebral cortex.	5, 738

SWEDEN

A-2338.....	Dr. Bertil Jacobson.....	Karolinska Institutet, Stockholm Sweden.	Development and use of endoradiosonde techniques.	\$16, 100
C-3082 (C2).....	Dr. Torbjörn Caspersson.....	do.....	Role of endocellular structures in the protein metabolism of the cell in normal and pathological growth studied with quantitative cytochemical procedures.	30, 000
C-3700 (C1).....	Dr. Georg Klein and Dr. Laszlo Revesz.	do.....	Cytogenetic studies on intercellular variability in populations of neoplastic cells.	15, 000
D-700 (C1).....	Dr. Arne Engstrom.....	do.....	Biphasical studies of bone and teeth.	15, 800
A-2156.....	Dr. Carl A. Genzell.....	Konung Gustaf V's Forskningsinstitut, Stockholm, Sweden.	Purification of human growth hormone.	8, 900
A-2568.....	Dr. Harry Bostrom.....	Wenner-Grens Institut, University of Stockholm, Stockholm, Sweden.	Metabolic studies on ester sulfate compounds in mammalian tissues.	23, 000
H-3219.....	Dr. Gustav Nylin.....	South Hospital, Stockholm, Sweden.	Further studies on the cerebral blood flow with labeled erythrocytes and some other circulatory problems.	39, 649
H-2842 (C1).....	Dr. Sune Gergstrom.....	University of Lund, Lund, Sweden.	Metabolism of steroids and bile acids.	15, 000

NORWAY

D-901.....	Dr. Tormod Morch.....	Norwegian Institute of Dental Research, Oslo, Norway.	Experiments on changes in topically treated enamel.	\$11, 886
M-1737 (C1).....	Dr. Aase Gruda Skard.....	Institute of Psychology, University of Oslo, Oslo, Norway.	Children's personality development in Oslo milieu.	12, 935

BELGIUM

H-3393 (C1).....	Dr. C. Heymans.....	Pharmacology Medical School, University of Ghent, Ghent, Belgium.	Regulation of arterial pressure and pathogenesis of hypertension, physiology and pharmacology of the pulmonary circulation, hemodynamics in hypothermia.	\$9, 000
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FOREIGN GRANTS APPROVED FOR PAYMENT—Continued

NETHERLANDS

No.	Name	Address	Project title	Amount
A-2108	Dr. Willy Hymans	Stichting Leidse Rheumatologische Kliniek, Leiden, The Netherlands.	Fundamental research on connective tissue and the rheumatic diseases.	\$14,545

GREECE

RG-C-5915	Dr. Leonidas Zervas	University of Athens, Athens, Greece	Phosphorylation of amino acids, peptides and sugars, nucleic acids.	\$15,000
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ITALY

C-3402(C2)	Dr. Peter Dohrn	Anton and Reinhard Dohrn Foundation, Napoli 101, Italy.	Cell growth, division, metabolism, and related problems.	\$10,000
RG-4845	Dr. F. Ghirelli	Anton and Reinhard Dohrn Foundation, care of Stazione Zoologica, Naples, Italy.	Metallo-proteins in marine invertebrates	10,350

GERMANY

CY-2735(R1)	Dr. Hans Lettre	Institut für experimentelle, Krebsforschung der Universität, Heidelberg, Germany.	Chemotherapeutical effect of components of treated tumor cells.	\$10,000
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Middle East

LEBANON

B-1701	Dr. William M. Shanklin	American University of Beirut, Beirut, Lebanon.	A histological study of neurosecretion in man	\$5, 146
E-2205	Dr. Calvin W. Schwabe	do	Host-parasite relationships in echinococcosis	20, 095
RG-5172(C1)	Dr. Najib Abu Haydar	do	The study of adrenal cortical function and anti-diuretic hormone excretion from infancy to the age of 2.	4, 600
H-3671	Dr. John L. Wilson	do	Cardiovascular disease in the Middle East	18, 745

ISRAEL

CY-3095(C2)	Dr. Ernst David Bergmann	Hebrew University, Jerusalem, Israel	Synthesis and biological properties of aliphatic fluoro-compounds	\$16, 330
E-1006(C2)	Dr. B. Feldman-Muehsam	The Hebrew University-Hadassah Medical School, Jerusalem, Israel.	The systematics and bionomics of ticks of the Middle East.	4, 428
E-1315(C2)	Dr. Oskar Theodor	The Hebrew University-Hadassah, Jerusalem, Israel.	A study of the parasites of wild mammals and birds in Israel (including parasites pathogenic for man).	2, 100
E-1494(C2)	Dr. Shlomo Hestrin	Hebrew University-Hadassah Medical School, Jerusalem, Israel.	Mechanism of synthesis of cellulose and related polysaccharides.	10, 000
H-3942	Dr. Henry Ungar	do	Necropsy survey of atherosclerosis in Israel	21, 100
CY-2810(C2)	Dr. David Lavie	The Weizmann Institute of Science Rehovoth, Israel.	Antitumor compounds from ecballium and related plants.	10, 953
RG-5217	Dr. Uriel Z. Littauer	do	Enzymatic ribopolynucleotide synthesis	8, 700
RG-5842	Dr. Martin Mordehai Halmann	do	Mechanism of hydrolysis of organic phosphates	15, 985
RG-5876	Dr. David Elson	do	The latent enzymatic activity of ribonucleoproteins.	9, 510
H-2478(C2)	Dr. Franz Sondheimer	do	Synthesis of the cardiac-active steroidal lactones	11, 000
A-2740	Dr. Aryeh Szeinberg	Government Hospital, Tel-Hashomer, Jerusalem.	Hemolytic diseases peculiar to the Mediterranean area.	12, 000
A-2857	Dr. Harry Heller	Tel-Hashomer Hospital, Bank Leumi, Ramat-Gan, Israel.	Biochemical changes in familial Mediterranean fever (FMF).	13, 860
RG-6111	Dr. Alexander S. Tahori	Israel Institutes for Biological Research, Ness, Ziona, Israel.	Studies on the mechanism of insect resistance to fluorolipidic compounds.	9, 487

FOREIGN GRANTS APPROVED FOR PAYMENT--Continued

Far East

HONG KONG

No.	Name	Address	Project title	Amount
B-1806	Dr. David Barker	University of Hong Kong, Hong Kong, British Crown Colony.	A quantitative study of mammalian proprioceptors.	\$11,000

JAPAN

C-3481(C1)	Dr. Toru Miyaji	Osaka University Medical School, Kitaku, Osaka, Japan.	Studies on hepatoma and cirrhosis of the liver in Japan.	\$4,000
RG-5871	Dr. Kazuo Okumuki	Osaka University, Nakanoshima 4-8, Osaka, Japan.	Crystalline Cytochrome c from various sources--	5,888
3-B-9065(C1)	Dr. Shigeo Okinaka	University of Tokyo School of Medicine, Tokyo, Japan.	Epidemiologic survey of selected neurologic and myopathic disorders in Japan (a collaborative study).	11,470
E-2459	Dr. Saburo Sugiura	Medical Research Institute, Kofu City, Japan.	Studies on schistosomiasis	12,000
C-4222	Dr. Osamu Hayaishi	Kyoto University, Kyoto, Japan	Studies on oxygenases	17,000
CY-2799(C2) and (C2S1)	Dr. Tomizo Yoshida	Medical Institute of Sasaki Foundation, Surugadai, Kanda, Tokyo, Japan.	Ascites tumor system for chemotherapy screening.	12,760

PHILIPPINES

E-2575	Dr. Carmen C. Velasquez	University of the Philippines, Quezon City, Philippines.	Parasites of Philippine food fishes	\$1,150
H-1720(C4)	Dr. Augusto A. Camara	College of Medicine, University of the Philippines, Manila, Philippine Islands.	Studies on the nature of edema particularly in beriberi and other deficiency states, with special reference to water and electrolyte balance.	18,100

AUSTRALIA

E-2462	Dr. M. F. Day	Commonwealth Scientific and Industrial Research Organization, Canberra, Australia.	Multiplication of an insect polyhedron virus.	\$7,040
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NEW ZEALAND

C-3707 (C1)	Dr. Frederick W. Gunz	North Canterbury Hospital Board, Christchurch, New Zealand.	Incidence and etiology of leukemia in New Zealand.	\$4,200
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AFRICA

E-2178(R1)	Dr. Robert S. Bray	Liberian Institute of the American Foundation for Tropical Medicine, Ind., Harbor, Liberia, West Africa. University of Natal, Durban, South Africa. The South African Council for Scientific and Industrial Research, Durban, Natal, South Africa. University of Cape Town, Rondebosch, Cape Province, South Africa.	Studies on malaria infections in chimpanzees.	\$21,850
H-4048(A)	Dr. John Wainwright		Pathology of atherosclerosis in the African (Bantu).	1,955
E-1592(C2)	Dr. R. Elsdon-Dew		The factors determining invasiveness in <i>Entamoeba histolytica</i> .	25,000
H-3316(C1)	Dr. J. F. Brock		Dietary fat, serum cholesterol and heart disease.	10,000

FOREIGN GRANTS APPROVED FOR PAYMENT—Continued

Latin America

ARGENTINA

No.	Name	Address	Project title	Amount
A-18(C9).....	Dr. Bernardo A. Houssay.....	Instituto de Biología y Medicina Experimental, Buenos Aires, Argentina.	(1) Study of dietary, endocrine and pharmacological agents on development, prevention, and treatment of experimental diabetes; (2) action of hormones, somatotropin and insulin, etc.	\$2, 500
RG-3442(C6).....	Dr. Luis Federico Leloir.....	Institute de Investigaciones Bioquímicas Fundación Compomar, Buenos Aires, Argentina.	Enzymes and coenzymes acting on hexosephosphates.	12, 200
H-3905.....	Dr. Manuel Rene Malinow.....	University of Buenos Aires Medical School, Buenos Aires, Argentina.	Distribution of intravenous estradiol H3 in atherosclerotic men.	5, 750

BRAZIL

B-1471(C1).....	Dr. Carlos Chagas.....	Instituto de Biofísica da Universidade de Brasil, Rio de Janeiro, Brazil.	Study of the mechanism of curarisation.....	\$34, 500
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COLOMBIA

H-3924.....	Dr. Carlos Restrepo.....	Universidad del Valle, Cali, Colombia.....	Atherosclerotic lesions in Cali, Colombia.....	\$2, 415
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CHILE

C-4191(A).....	Dr. Gabriel Gasic.....	University of Chile, Santiago, Chile.....	Carcinogen-induction of chorioepithelioma in mice.	\$2, 300
E-1867(C1).....	Dr. Moises Agosin.....	University of Chile, School of Medicine, Santiago, Chile.	Metabolism of <i>Echinococcus granulosus</i>	2, 100
E-2300.....	Dr. Amador Neghme.....	University of Chile, Santiago, Chile.....	Mode of action of insecticides and mechanism of insecticide resistance in <i>Triatoma infestans</i> .	12, 960
RG-5631.....	Dr. Osvaldo Cori.....	University of Chile School of Medicine, Santiago, Chile.	Enzymatic synthesis of phosphocreatine and phosphoarginine from acyl phosphate.	2, 300

PERU

C-3338(C1)	Dr. Pablo Mori-Chavez	Universidad Nacional Mayor de San Marcos, Lima, Peru.	The effect of high altitude on neoplastic growth.	\$12,500
RG-3123(C7)	Dr. Alberto Hurtado		Evaluation of saline therapy in thermal burns. Therapy of pseudomonas infections.	19,880

GUATEMALA

A-981(C3)	Dr. Nevin S. Scrimshaw	Institute of Nutrition of Central America and Panama, Guatemala City, Guatemala, Central America.	Dietary factors in kwashiorkor	\$27,750
RG-6112	Dr. Werner Ascoli	Pan American Sanitary Bureau, Guatemala City, Guatemala, Central America.	Interrelations between malnutrition and diarrhea.	25,000
H-2653(C2)	Dr. Nevin S. Scrimshaw	Institute of Nutrition of Central America and Panama, Guatemala City, Guatemala, Central America.	Comparative study of atherosclerosis in population groups with widely different dietary and other habits.	32,959

PANAMA

E-1251(C2)	Dr. Marshall Hertig	Gorgas Memorial Laboratory, Panama, Republic of Panama.	The transmission of leishmaniasis in Panama.	\$43,840
E-1941(C1)	Dr. Carl H. Johnson		Ecology of Sylvan yellow fever in Panama.	27,500
B-1326(C1)	Dr. M. Puig Solanes	General Hospital, Mexico, Federal District, Mexico.	Comparative anatomical and physiological study of the structures related to the maintenance of intraocular pressure in Mexican Indians, "Mestizos" and white people.	8,000
A-1520(C1)	Dr. Federico Gomez S	Hospital Infantil, Mexico 7, Federal District, Mexico.	Chemical homeostasis in infantile protein malnutrition.	20,000
E-2187	Dr. Enrique S. Palomera	Hospital Juarez, Mexico, Federal District, Mexico.	The role of infections in late deaths following extensive burns.	5,290

GRANTS FOR SPECIAL PURPOSES
SWITZERLAND

No.	Name	Address	Project title	Amount
RG-6043	Dr. M. G. Candau	World Health Organization, Palais des Nations, Geneva, Switzerland.	Research into international opportunities to promote research training and investigations of medical and related problems.	\$300,000
NETHERLANDS				
H-2898(C2)	Dr. M. W. Woredeman	Excerpta Medica Foundation, Amsterdam, the Netherlands.	Publication of Cardiovascular Abstracting Journal.	\$19,550
M-2373(C1)	do.	do.	Publication of Gerontology Abstracting Journal.	11,500
H-3621(C1)	do.	do.	do.	23,000
ARGENTINA				
RG-5969	Dr. B. A. Houssay	International Congress of Physiological Sciences, Buenos Aires, Argentina.	XXI International Congress of Physiological Sciences.	\$13,500

LACK OF TRAINED MANPOWER

Dr. HUNT. The lack of research-trained manpower is a limiting factor in the conquest of disease and the accumulation of new knowledge in basic medical and biological fields.

These problems require broad action, otherwise the pace of fundamental and applied research and clinical medicine will be hampered.

Training funds were increased from \$2,962,000 in 1958 to \$6,040,000 in 1959, permitting, among other things, the establishment of additional training programs. By the end of this year 170 research training programs will have been established as compared to 75 in 1958.

The research fellowship program is expected to continue at its 1959 level of \$3,260,000, supporting "Regular, postsophomore, foreign, part-time and senior research fellowships."

RESEARCH ON GERONTOLOGY

The Center for Aging Research which was established in 1956 has been transferred to the Division from the National Heart Institute. This group stimulates and coordinates research and training in gerontology through both grants and direct research by all Institutes.

The total National Institutes of Health support of projects relating primarily to gerontology was over \$2 million in calendar year 1958 and \$4,133,980 in 1959. Noteworthy accomplishments of work in aging include the establishment of the interdisciplinary research project at Duke University, which was reported to this committee last year, and a second similar project at the Albert Einstein College of Medicine, which was approved by the Surgeon General in April 1958. The Center for Aging Research plans to stimulate further inquiry into three broad areas:

- (1) Behavioral and social sciences;
- (2) The clinical sciences; and
- (3) The biological sciences.

The effect of House action:

USE OF HOUSE INCREASE

The House Committee on Appropriations, in acting on the appropriations for the Department of Health, Education, and Welfare for 1960, increased the President's budget by \$7,430,000 for the appropriation "General Research and Services, National Institutes of Health."

As the Secretary indicated, this increase is contrary to the fiscal policy of the President.

However, at the request of the Senate Appropriations Committee, the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Activity No. 1(a)—Research projects:

The House allowed the full amount of \$16,125,000 and added an amount of \$2,834,000, which will be utilized to support research in fundamental medical and biological research, research in problems of public health, and research in aging. This amount of \$18,959,000 is an increase of \$2,338,000 over the 1959 appropriation.

Senator HILL. Now this research in fundamental medical and biological research in research which is often referred to as "basic research," is it not?

Dr. HUNT. Yes, sir.

Dr. SHANNON. I would like to comment on that simply to clarify the record. I do not want the record to appear that this area of research is normally the responsibility of the National Science Foundation. The basic research that we support is that research in the sciences upon which all medicine depends, although it is basic research, that is, fundamental research. Although the same sciences are supported by the National Science Foundation, NIH support covers those areas that require special emphasis, and does not in any sense show a duplication of effort.

Senator HILL. Thank you, Doctor.

RESEARCH FELLOWSHIPS

Dr. HUNT. Under activity No. 1(b)—Research fellowships, the House allowed the full amount requested, of \$3,260,000, and added \$1,300,000, which will be utilized in full-time regular research fellowships, postsophomore fellowships, and senior research fellowships.

ACTIVITY NO. 1(c)—TRAINING

The House allowed the full amount requested of \$6,040,000, plus an additional \$3 million, which will be utilized to support training in the areas of basic biological, medical, and health-related sciences and in other specialty areas where acute shortages of research-trained manpower exist.

ACTIVITY NO. 2(b)—REVIEW AND APPROVAL OF GRANTS

The House allowed the full amount requested of \$855,000 and 63 positions, plus an additional \$185,000, and 8 positions, which will be used to employ additional professional and clerical staff required for the grants program and their proportionate share for centrally furnished services.

This amount of \$1,040,000 is an increase of \$223,000 over the 1959 appropriation.

ACTIVITY NO. 2(a)—BIOLOGIC STANDARDS

For the portion of this appropriation which supports the Division of Biologic Standards, the House allowed the full amount requested of \$2,694,000 and 205 positions, plus an additional \$111,000 and 10 positions, which will be utilized to employ additional staff for servicing the new building and for licensing and inspecting of biologicals, bloods for transfusions in the Clinical Center, and genotyping of bloods including sera, physical standards used in control of biological products, professional training, and verbatim reporting, and a proportionate share for centrally furnished services. This amount of \$2,805,000 is an increase of \$569,000 over the 1959 appropriation.

REQUEST FOR RESCISSION OF FUNDS

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

That is the end of our statement. If you have any questions, sir, I would be very happy to answer them.

Senator HILL. It would be your professional judgment, though, would it not, that these funds could be effectively used?

Dr. HUNT. We believe they could be effectively used.

Senator HILL. Are there any questions? If not, we thank you very much, Doctor.

NATIONAL CANCER INSTITUTE

STATEMENT OF DR. JOHN R. HELLER, DIRECTOR, NATIONAL CANCER INSTITUTE; ACCOMPANIED BY DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“To enable the Surgeon General, upon the recommendations of the National Advisory Cancer Council, to make grants-in-aid for research and training projects relating to cancer ; to cooperate with State health agencies, and other public and private nonprofit institutions, in the prevention, control, and eradication of cancer by providing consultative services, demonstrations, and grants-in-aid ; [and to contract on a cost or other basis for supplies and services by negotiation, without regard to section 3709 of the Revised Statutes, in connection with the chemotherapy program, including indemnification of contractors to the extent and subject to the limitations provided in title 10, United States Code, section 2354, except that approval and certification required thereby shall be by the Surgeon General ;] and to otherwise carry out the provisions of title IV, part A, of the Act ; [\$75,268,000] \$75,218,000.”

Amounts available for obligation

	1959 appro- priation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$75, 268, 000	\$75, 218, 000	\$83, 308, 000
Deductions:			
Comparative transfer to "Assistance to States, general, Public Health Service".....	—50, 000	0	0
Unobligated balance, estimated savings.....	—2, 407, 000	0	0
Total obligations.....	72, 811, 000	75, 218, 000	83, 308, 000

Obligations by activities

Description	1959 appropriation		1960 budget estimate		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Grants:						
(a) Research projects.....		\$28, 632, 000		\$29, 209, 000		\$33, 709, 000
(b) Research fellowships.....		1, 427, 000		1, 427, 000		1, 712, 000
(c) Training.....		6, 050, 000		6, 050, 000		7, 205, 000
(d) State control programs.....		2, 250, 000		2, 250, 000		2, 250, 000
(e) Field demonstrations and studies.....						1, 500, 000
2. Direct operations:						
(a) Research.....	675	10, 653, 000	675	11, 404, 000	695	11, 831, 000
(b) Review and approval of grants..	37	797, 000	37	840, 000	47	921, 000
(c) Professional and technical as- sistance.....	437	4, 504, 000	479	5, 532, 000	479	5, 666, 000
(d) Chemotherapy contracts.....	125	18, 142, 000	125	18, 142, 000	125	18, 142, 000
(e) Administration.....	30	356, 000	30	364, 000	30	372, 000
Total obligations.....	1, 304	72, 811, 000	1, 346	75, 218, 000	1, 376	83, 308, 000

Obligations by objects

Object classification	1959 appro- priation	1960 budget estimate	1960 House allowance
PUBLIC HEALTH SERVICE			
Total number of permanent positions.....	1, 179	1, 221	1, 251
Full time equivalent of all other positions.....	52	52	52
Average number of all employees.....	1, 163	1, 218	1, 238
Number of employees at end of year.....	1, 316	1, 343	1, 370
01 Personal services.....	\$6, 855, 800	\$7, 273, 100	\$7, 377, 100
02 Travel.....	281, 000	324, 500	325, 500
03 Transportation of things.....	48, 300	63, 300	63, 300
04 Communication services.....	110, 500	112, 000	112, 000
05 Rents and utilities.....	17, 100	17, 100	17, 100
06 Printing and reproduction.....	97, 500	105, 200	105, 200
07 Other contractual services.....	18, 532, 800	19, 127, 700	19, 342, 700
Reimbursements to "National Institutes of Health management fund, Public Health Service".....	5, 147, 000	5, 889, 000	6, 123, 000
08 Supplies and materials.....	1, 818, 200	1, 877, 100	1, 877, 100
09 Equipment.....	627, 500	557, 300	647, 300
11 Grants, subsidies, and contributions.....	38, 284, 000	38, 861, 000	46, 301, 000
Contributions to retirement fund.....	328, 100	344, 700	350, 700
13 Refunds, awards, and indemnities.....	2, 000	2, 000	2, 000
15 Taxes and assessments.....	28, 400	31, 200	31, 200
Subtotal.....	72, 178, 200	74, 585, 200	82, 675, 200
Deduct quarters and subsistence charges.....	-17, 200	-17, 200	-17, 200
Total, Public Health Service.....	72, 161, 000	74, 568, 000	82, 658, 000
ALLOCATION TO VETERANS' ADMINISTRATION			
Total number of permanent positions.....	125	125	125
Average number of all employees.....	95	95	95
Number of employees at end of year.....	117	117	117
01 Personal services.....	\$500, 400	\$502, 400	\$502, 400
02 Travel.....	77, 600	77, 600	77, 600
06 Printing and reproduction.....	500	500	500
07 Other contractual services.....	10, 000	10, 000	10, 000
08 Supplies and materials.....	11, 000	11, 000	11, 000
09 Equipment.....	22, 100	20, 100	20, 100
11 Grants, subsidies, and contributions, contributions to retirement fund.....	27, 400	27, 400	27, 400
15 Taxes and assessments.....	1, 000	1, 000	1, 000
Total, Veterans' Administration.....	650, 000	650, 000	650, 000
Total obligations.....	72, 811, 000	75, 218, 000	83, 308, 000

Summary of changes

	Positions	Amount
1959 appropriation.....	1,312	\$75,268,000
Transfers: Comparative transfer to "Assistance to States, general, Public Health Service.....	-8	-50,000
Adjusted 1959 appropriation.....	1,304	75,218,000
Deduct: Unobligated balance, estimated savings.....		-2,407,000
1960 base.....	1,304	72,811,000
1960 appropriation request.....	1,346	75,218,000
Net change requested.....	42	2,407,000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Decreases: Miscellaneous other objects.....		-\$151,600		-\$151,600
Increases:				
For mandatory items:				
Annualization costs for 42 additional positions authorized in 1959.....		142,000		142,000
Extra day of pay (261 days in 1959 and 262 days in 1960).....		23,100		23,100
Subtotal mandatory items.....		165,100		165,100
For program items:				
New grants for research projects:				
General.....		577,000		3,877,000
Programed grants in chemotherapy.....				1,000,000
Field investigations.....				200,000
Increase in fellowships.....				285,000
Increase in traineeships.....				240,000
Increase in research training grants.....				915,000
Establishment of field demonstrations and studies program.....				1,500,000
Expansion of direct research virus and circulating blood studies and expansion of clinical research activities.....		60,000	20	287,000
Increase for review and approval of grants.....			10	55,000
Expansion of the cancer control program.....	42	435,600	42	435,600
Expansion of the diagnostic development program.....		578,900		712,900
Adjustments in reimbursement to "National Institutes of Health, management fund".....		742,000		976,000
Subtotal program items.....	42	2,393,500	72	10,483,500
Total change requested.....	42	2,407,000	72	10,497,000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$8,090,000 for the National Cancer Institute. As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Activity No. 1 (a)—Research projects

The full amount requested of \$29,209,000 was allowed by the House and an increase of \$4,500,000 was provided for additional research projects. The total of \$33,709,000 is an increase of \$5,077,000 over the 1959 appropriation. This increase will be used to support research in virology, chemotherapy, immunology, host tumor relationships, genetics, tissue synthesis and carcinogenesis.

Activity No. 1 (b)—Research fellowships

The full amount requested of \$1,427,000 was allowed by the House and an increase of \$285,000 was provided for additional research fellowships to support carefully selected scientists devoting full time to research training in fields pertinent to cancer research.

Activity No. 1(c)—Training

The full amount requested of \$6,050,000 was allowed by the House and an increase of \$1,155,000 was provided for this activity. Of the House increase, \$240,000 will be used for training stipends to support additional graduate physicians who desire specialized training in the diagnosis and treatment of cancer. The remaining \$915,000 will permit additional grants to universities and medical schools for training programs designed to increase the supply of manpower in disciplines needed for cancer research.

Activity No. 1(e)—Field demonstrations and studies

The House provided \$1,500,000 to initiate a new program for support of special project grants, which will permit the Public Health Service to better carry out its assigned role of assisting local agencies in communities throughout the Nation, to develop programs against cervical cancer, lung cancer and in other areas where important prevention and control opportunities now exist and may develop.

Activity No. 2(a)—Research

The full amount requested of \$11,404,000 and 675 positions was allowed by the House, and an increase of \$427,000 and 20 positions was provided for this activity. The total of \$11,831,000 is an increase of \$1,178,000 over the 1959 appropriation. Of the total program, \$891,000 is for the Institute's proportionate share of services furnished centrally. The remaining \$287,000 will permit expansion of virus studies, tumor cells in circulating blood studies and clinical research activities.

Activity No. 2(b)—Review and approval of grants

The full amount requested of \$840,000 and 37 positions was allowed by the House, and an increase of \$81,000 and 10 positions was provided for this activity. The total of \$921,000 is an increase of \$124,000 over the 1959 appropriation. Of the total increase, \$69,000 is for the Institute's proportionate share of services furnished centrally. The remaining \$55,000 and 10 positions will permit adequate review and approval of the additional grants to be supported.

Activity No. 2(c)—Professional and technical assistance

The full amount requested of \$5,532,000 and 479 positions was allowed by the House, and an increase of \$134,000 was provided for this activity. The total of \$5,666,000 is an increase of \$1,162,000 over the 1959 appropriation. Of the total program increase, \$437,000 and 42 positions will permit the expansion of the cancer control program to foster the more rapid and widespread application of the available techniques for early detection of cancer. The remaining \$725,000 will permit expansion of the diagnostic development program.

Activity No. 2(e)—Administration

The full amount requested of \$364,000 and 30 positions was allowed by the House and an increase of \$8,000 was provided for this activity. The total of \$372,000 is an increase of \$16,000 over the 1959 appropriation. This increase is for the Institute's proportionate share of services furnished centrally.

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

Allocations of grant-in-aid funds for cancer control

State or Territory	1958 allo- cations	1959 allo- cations	Esti- mated 1960 allo- cations	State or Territory	1958 allo- cations	1959 allo- cations	Esti- mated 1960 allo- cations
Alabama-----	\$50,400	\$49,700	\$49,100	New Hampshire---	\$9,800	\$9,800	\$9,800
Alaska-----	7,900	7,400	7,500	New Jersey-----	64,200	64,900	65,100
Arizona-----	16,100	16,500	16,800	New Mexico-----	14,100	14,000	13,900
Arkansas-----	33,700	33,000	32,400	New York-----	196,900	192,600	190,300
California-----	140,400	142,300	144,000	North Carolina---	62,700	62,800	62,700
Colorado-----	23,000	23,200	23,500	North Dakota-----	13,800	13,400	13,300
Connecticut-----	25,400	25,200	25,300	Ohio-----	106,200	105,800	105,800
Delaware-----	4,400	4,500	4,600	Oklahoma-----	33,900	33,900	33,600
District of Colum- bia-----	9,500	9,200	9,200	Oregon-----	24,400	24,500	24,700
Florida-----	49,100	51,400	54,300	Pennsylvania-----	138,600	137,800	136,700
Georgia-----	53,300	53,200	53,000	Rhode Island-----	10,700	11,100	11,100
Idaho-----	12,300	12,100	12,300	South Carolina---	36,000	36,300	36,700
Illinois-----	109,700	109,500	109,800	South Dakota-----	14,500	14,300	14,100
Indiana-----	53,100	53,700	53,700	Tennessee-----	52,300	51,300	50,400
Iowa-----	38,400	39,200	39,100	Texas-----	108,900	109,700	110,700
Kansas-----	30,600	30,300	30,100	Utah-----	13,700	13,700	13,800
Kentucky-----	46,600	46,100	45,900	Vermont-----	8,000	8,200	8,100
Louisiana-----	44,200	44,000	43,700	Virginia-----	46,100	46,800	48,000
Maine-----	17,000	17,200	17,100	Washington-----	32,800	33,400	33,700
Maryland-----	31,600	31,900	32,400	West Virginia-----	29,500	29,200	28,500
Massachusetts-----	62,600	62,400	61,400	Wisconsin-----	48,900	49,500	49,800
Michigan-----	82,900	84,400	84,500	Wyoming-----	7,800	7,500	7,600
Minnesota-----	44,600	44,900	44,600	Hawaii-----	7,000	7,300	7,500
Mississippi-----	41,900	42,100	41,700	Puerto Rico-----	39,100	38,300	38,300
Missouri-----	57,300	56,600	55,600	Virgin Islands-----	1,000	1,000	1,000
Montana-----	12,000	11,900	12,200	Guam-----	1,100	1,200	1,200
Nebraska-----	23,400	23,400	23,300				
Nevada-----	6,600	6,400	6,500				
				Total-----	2,250,000	2,250,000	2,250,000

PREPARED STATEMENT

Senator HILL. Dr. Heller, we will be glad to have you proceed in your own way.

Dr. HELLER. Mr. Chairman and members of the committee, I have a full statement which, if you desire, can be placed in the record, and I could briefly summarize the statement.

Senator HILL. All right; we will carry your statement in full in the record, and you may proceed, sir.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, NATIONAL CANCER INSTITUTE PUBLIC HEALTH SERVICE ON
NATIONAL CANCER INSTITUTE

Mr. Chairman and members of the committee, since I last came before this committee to review the activities of the National Cancer Institute, we have witnessed a substantial increase in the scope of cancer research. The Congress has been responsive to the increasing need for expanded work in this field and has made it possible for the National Cancer Institute to continue, and in some cases to augment, its comprehensive program. Our plans for 1960 call for an appropriation level of \$75,218,000 which, including comparative transfer, is the same as 1959, but \$2,407,000 greater than the 1959 obligation plan.

A great deal of valuable new information on the complex problem of cancer has been gained through the efforts of scientists throughout the United States and abroad. One of the best illustrations of the worldwide activity in cancer investigation was the very successful Seventh International Cancer Congress, which met last July in London. More than 2,500 members representing 63 nations attended the meetings and heard papers presented by some of the world's outstanding cancer investigators.

Another new development affecting cancer research is the steadily increasing level of cooperation between the Federal Government, independent research scientists and institutions, the academic world, and American private industry. This is best illustrated in the operation of the national cancer chemotherapy

program, but it is also important of other areas of the study of cancer and in medical science generally.

An additional, significant development in this field is the strengthening of the Cancer Control Program in the Bureau of State Services to which the National Cancer Institute provides technical guidance and assistance. This staff has the responsibility of encouraging and aiding the prompt application of new knowledge and techniques by private physicians and public health and allied workers throughout the country. Priority is being given in this program to promoting the broader use of the cytological examination for cancer of the cervix so that the possibility that we now have of substantially eliminating deaths from this cause may be achieved as soon as possible.

Thus, I believe that we are now in a new era of cancer research, one in which we can anticipate much progress toward the control of malignant disease. The National Cancer Institute, with the guidance provided by this committee, is continuing to take a leading role in the quest for new knowledge of cancer. Our intramural and extramural research programs, now at their most active level, are producing important results in the numerous scientific disciplines that comprise cancer research.

I should like now to report to the committee some highlights of the year's activities of the National Cancer Institute. I have organized my remarks under three general headings reflecting particular areas of research in which the committee has manifested special interest. These headings are: Virus studies, diagnostic tests, and cancer chemotherapy research. In addition, I shall describe several other important pieces of research that appear to be highly significant.

VIRUS RESEARCH

Last year, I reported to the committee some truly exciting results of investigations into the relationship of viruses to cancer. National Cancer Institute staff scientists, working in productive collaboration with investigators in the Division of Biologics Standards, had succeeded in producing a variety of tumors in mice by injecting them with an agent that appeared to be a virus. Within the past year, this group of investigators has carried their studies further and reported in the scientific literature some most interesting results.

The agent now has been shown beyond question to be a virus, which produces malignancies not only in mice, but in rats and hamsters as well. In other words, it has the remarkable property of causing tumors in genetically unrelated types of animals. More recently, these scientists were successful in developing an immunizing agent that is 97 percent effective in preventing the growth of tumors in hamsters challenged with the virus. This work obviously is of far-reaching significance, because it provides valuable information on the virus-tumor relationship, and because it will undoubtedly stimulate additional research.

This raises the question: How can virus-cancer research be pursued and accelerated in the most productive and efficient fashion? Within the past few months, a group of outstanding scientists from the fields of virology, biochemistry, pathology, immunology, cellular biology, and biophysics met at the National Institutes of Health to discuss the present status of virus-cancer investigations and to make recommendations for the future conduct of these important studies.

The scientists agreed that there is a need for much additional basic research to provide detailed information on viruses themselves and on the hosts, including man. Tissue culture was cited as a fundamental tool for such research as were electron microscope studies and investigations utilizing model tumor systems with reference to man. The group recognized the need for additional training of biologists, zoologists, and chemists in fields related to the virus-cancer problem. Further, it recommended that some means be sought to improve the availability and distribution of living host and virus materials for use in research.

At the National Cancer Institute, we are now taking steps to expand virus research both within the intramural framework and extramurally through the grants programs. A virus research section has been created in the laboratory of biology in order to strengthen investigations of this kind at the Institute. Furthermore the National Advisory Cancer Council has recommended that research grants be awarded to support large-scale, interdisciplinary explorations over long periods of time, which could be extremely valuable for further progress in virus research.

This problem, like others in the cancer field, is difficult because it deals neither with particular fields of investigation nor with single biological entities, but with biological, biochemical, and biophysical interaction of three intimately associated elements: virus, cell, and host. Thus, the primary hurdle to be crossed is to identify and explain the nature of this interaction.

Without attempting to probe deeply into the complexities of cancer-virus research, let me just mention a few of the questions for which adequate answers are lacking. If we assume that all cancers result from virus infection, does this mean that viruses cause cells to multiply and thus increase the production of variant cells less susceptible to growth control, or does the infection affect the growth control mechanism itself leading to the overproduction of altered cells? Does the cellular alteration represent a response of the cell to interaction of virus conditioned by environmental factors, or does it signify the transduction, or passage, of virus material from a malignant cell to a normal one? It is apparent that we are not dealing with a particular problem in virology or cancer biology, but rather with a host of problems whose solution will only be found through arduous, intensive, and often frustrating research.

Quite naturally, as more and more knowledge is accumulated on the role of viruses in cancer causation we can anticipate a growing interest in the possibility of developing an anticancer vaccine, similar perhaps to the Salk vaccine. Development of the polio vaccine was based essentially on an old and simple formula; find the virus, associate it causatively with the disease, produce a vaccine. In the case of polio, it was possible to apply this formula in a reasonable time with a comparatively small amount of basic research, small in comparison with the vast accumulation of information already available from cancer research. Nonetheless, with respect to polio the result is a vaccine that works, although how it works is not completely understood. The same formula might be applicable to cancer viruses, including those that may be associated with human cancer. With cancer viruses, however, the vast majority of the prerequisite fundamental research has not been accomplished.

The select group of scientists who gathered at National Institutes of Health to discuss cancer-virus research agreed that such studies may lead to a major advance in human cancer research. We are enlisting the aid of a number of eminent virologists who will advise us in formulating a program of virus-cancer research. I am glad to say that some of the scientists who were most active in the polio research effort have decided to apply their talents to the study of malignant disease, and will undoubtedly make significant contributions in this important field.

DIAGNOSTIC TESTS

By the use of presently available diagnostic means, it is difficult to detect most forms of cancer at their earliest, most localized, symptom-free stage. Yet, according to most authorities, if there is to be substantial improvement in the cancer cure rate, it is necessary that the disease be diagnosed as early as possible and then effectively treated.

Even a casual examination of the scientific literature for the past few years reveals that comparatively little investigation has been aimed at the problem of early cancer diagnosis. Perhaps this results from the belief that improvement in diagnosis could be achieved only after some significant differences were found between normal and malignant cells. Yet, the experience to date gained through the application of exfoliative cytology to the detection of uterine cervical cancer seems to indicate that we, perhaps, need not await the accumulation of additional fundamental knowledge of cancer before we attempt to develop new diagnostic procedures.

There is now a large enough body of scientific information, based on clinical studies and animal research, to suggest certain approaches to this problem that warrant careful study. Furthermore, there are certain research tools, instruments, and techniques that we feel lend themselves readily to investigation of new approaches in cancer diagnosis.

The National Cancer Institute is presently developing preliminary plans for a program of diagnostic research along what we believe to be sound lines. I should like to sketch briefly the form we feel such a program ought to take.

The approach to this problem will undoubtedly be quite broad in scope because of the many scientific disciplines that must be brought to bear on it. As we now envision it, the research will proceed along four major lines: (1) the measurement of some product of malignant growth; (2) the measurement of some bodily change produced by cancer; (3) the measurement of some change in the

body that favors the development of cancer; and (4) the development of instruments that may facilitate the identification of cancer by mechanical, physical, electronic, or other means.

We anticipate that this research will be carried out under grants, contracts, and direct operations; and we expect that any positive results that may be achieved must still be a number of years in the future.

As an initial step in the creation of a diagnostic research program members of our staff have met with ad hoc committees of scientists from such fields as biology, biochemistry, endocrinology, pathology, tissue culture, radiology, and electronics to discuss techniques and methods in their respective areas that seem to merit investigation with respect to cancer diagnosis. These meetings should serve to spark an interest on the part of some of the participants and stimulate them to enter directly into the diagnostic studies field. Moreover, the recommendations suggested by participants at such meetings could lead to the initiation of research projects supported either by grants or contracts.

Of course, I am talking now about a program that is still in the cradle, so to speak. I would not attempt to say what course a diagnostic research program of this kind will take. Developments in cancer research, both basic and clinical, could alter radically our future needs in the area of cancer diagnosis. At present, however, we feel that this is a field worthy of carefully directed, planned investigation. A special report on the diagnostic research program is being submitted separately.

This past year has brought several other important developments in cancer detection and diagnosis that we consider to be most encouraging.

I have described to this committee in past years our efforts to develop the cytoanalyzer, an electronic device designed to speed the examination of specimens obtained in the cytologic test for uterine cervical cancer. I can now report that this instrument has been found to be capable of accurately selecting a significant percentage of specimens that need not be examined further by cytotechnicians or pathologists. The cytoanalyzer has, therefore, the potential of being useful in the application of the cytologic test among large groups of women. This means, of course, that it may help to alleviate the need for additional qualified cytotechnicians who are in short supply.

Still more improvement of the cytoanalyzer needs to be made. We think, for instance, that its accuracy can be improved, that more of its operations can be made automatic, and that it can be modified for use in the examination of cytologic specimens obtained from other parts of the body. I am confident that continued improvement of the cytoanalyzer, coupled with advances in the cytologic technique for cancer detection, will provide medical science with a powerful weapon for cancer control.

Another important aspect of the research effort to find new methods of cancer diagnosis centers around the peripheral blood studies that I described to the committee last year. Since then, this important work has progressed fruitfully; and I can now report that a group of our scientists recently described a technique for preparing human whole blood so that it can be examined cytologically for the presence of malignant cells.

In each of several experiments to test the procedure, tumor cells from a variety of sources were added to samples of human whole blood. In each experiment, the number of tumor cells detected was virtually identical to the number of cells originally added to the whole blood. In no case was the margin of error greater than 10 percent. Furthermore, the recovered tumor cells were intact, which means that it was possible to determine the type of malignant growth from which they had originated.

The scientists concluded from these studies that their method seems to fulfill all the requirements of an ideal procedure for processing samples of blood containing tumor cells for microscopic examination. We consider this to be an achievement of the first importance. Further research, now in progress, is aimed at ascertaining the significance of circulating tumor cells in individual patients affected with various types of cancer. This work will require at least 5 years to complete.

The progress achieved within the past several years seems to substantiate the belief that we are on the threshold of some fundamental improvements in cancer diagnosis. Certainly the development of the cytologic technique is of tremendous importance. Perhaps it will be possible to develop other ways of finding cancer early, when it is most responsive to treatment, and in this way sharply reduce the loss of life from malignant disease.

The cytologic technique for the detection of cancer of the uterine cervix, which has been intensively studied by the National Cancer Institute for more than 10 years, is now an established, widely used cancer control measure. Last December 15, the Bureau of State Services of the Public Health Service established a unit, with the technical help from the National Cancer Institute, for the application of uterine cytology to the control of this form of cancer in the population. However, the National Cancer Institute still retains a vigorous cytology research program, which is aimed at gathering much-needed information on the natural history of uterine cervical cancer, utilizing cytology in the study of malignant cells in circulating blood, and at perfecting methods of applying cytology to the detection of cancer of other body sites, such as the lung, genitourinary system, and colon.

Permit me to describe some of the basic ideas underlying the plans for the operation of the new cancer control program of the Bureau of State Services.

It is incumbent upon us to see that no opportunity is overlooked to insure that the maximum benefits from past and future research accomplishments are realized without avoidable delay. To accomplish this objective, we consult with interested groups concerned with stimulating local practicing physicians, who are the focal point of all community cancer control efforts, to put to use the latest information and techniques. Since a local, as well as a national, cancer control program can be successfully carried out only as a cooperative venture among private physicians, medical groups, voluntary agencies, hospital and laboratory personnel, and public health officials, these resources must be mobilized in a cooperative, integrated effort. Support is required to organize and assist this combined leadership in developing their programs, particularly in areas that promise important immediate results such as cervical cancer casefinding and professional education.

The national network of public health services can make a major and unique contribution to this effort. Its officials work in almost all the Nation's communities and closely coordinate their activities with the services of private physicians and interested professional and voluntary agencies. As a result, they can help local doctors and other interested groups in adapting new practices to local conditions and in organizing educational programs. The cancer control grant-in-aid program—\$2,250,000 in the budget request—has played a major role in initiating the work of State and local health agencies in cancer control.

It has been estimated that if all current knowledge were fully applied, the 5-year survival rate for all cancers could be increased from the present rate of 32 percent to over 50 percent. This optimism arises, in part, from the following facts: (1) half of all cancers grow in parts of the body that are subject to direct examination, (2) with early detection, more cancers can be successfully treated and cured or arrested, and (3) more effective techniques for the early detection of certain common cancers are now available and still others are being developed.

One of the most important dividends we have thus far realized from our research investment is the discovery that uterine cancer in women can be detected by a simple cytological test before definitive symptoms appear and when it is almost always curable. Since this cause of cancer death—currently killing about 16,000 women annually—can now be practically eliminated, first priority must be given to expanding programs in this field. There are today an estimated 60,000 women in the United States with undiscovered asymptomatic cases of invasive cervical cancer—if these cases are discovered early and treated adequately, almost all these women can be saved; however, the chances of successful cure fall rapidly as diagnosis and treatment are delayed.

It is proposed to expand our efforts to foster a more widespread application of the cell examination test for cervical cancer in local communities throughout the Nation. An expanded cancer control program staff will work with private physicians and the personnel of State and local official and voluntary agencies to help further the widest possible use of this examination in screening apparently healthy women and to help insure that all suspicious cases promptly receive required care. A number of demonstrations of cooperative systems of casefinding, diagnosis, and treatment adapted to a variety of local conditions and resources will be sponsored and assistance provided to train additional personnel, particularly cytotechnicians. Educational services will also be focused on showing women the value of periodic examinations so that high rates of voluntary participation are achieved.

In summary, the increasing activities of the cancer control program in cervical cancer and other activities will complement our other activities by encouraging

and assisting the prompt and widespread use of research findings in local service programs. To insure the success of these efforts, activities will be based on full and free consultation and cooperation with medical groups and others allied in this work. Since the goal of all our labors is to prevent cancer illness and death wherever possible, these efforts to insure the widest possible application of available knowledge are an essential aspect of our total program.

THE CHEMOTHERAPY PROGRAM

The national voluntary program of cancer chemotherapy research is now in full operation, with each of its phases functioning at a high level of efficiency and effectiveness. You will recall that last year I indicated some imbalances in the program that we felt could be corrected within a year. This has now been accomplished, I am happy to say, and the chemotherapy activity is now becoming a mature segment of the National Cancer Institute program.

During the year, the clinical trials operation was augmented in scope, permitting the careful evaluation of a substantial number of anticancer drugs. At present, between 150 and 200 hospital services, organized into 18 cooperative clinical groups, are participating in the program. More than 70 drugs are being studied against a variety of malignancies: the leukemias, cancer of the breast, prostate, lung, rectum, colon, ovary, skin, bone, and other sites. Drugs are being tested alone, in comparison with other agents, and as adjuncts to other forms of therapy, particularly surgery.

Many of the drugs now under investigation have been used for some time in the treatment of cancer and are well known to the medical profession. These are used as references in the evaluation of newer drugs. Some of the agents being evaluated clinically have been specially designed by scientists in an attempt to develop new and more effective anticancer drugs. In most cases, these compounds are still in a preliminary stage of clinical evaluation involving a limited number of patients. Those found safe and effective are being placed in full-scale clinical trial.

The information gained through these extensive clinical trials, indeed in the entire chemotherapy research program, is valuable beyond estimation. Of course, the program could, and hopefully will, lead to the development of one or more drugs with which to cure human cancer. This undertaking will also unquestionably produce a wealth of scientific knowledge that could not be gained otherwise in so short a time. By the establishment of this program, directed as it is at the solution of a single health problem, we have created a research mechanism that could furnish principles and techniques applicable to the development of drug research programs for other disease categories. In a larger sense, though, the intensive search for anticancer drugs will benefit science generally, because it will foster the acquisition of new knowledge in many of the biological and some of the physical sciences at a markedly accelerated rate.

I reported to the committee last year that the pharmaceutical, chemical, and allied industries had begun to take a most active and important part in the chemotherapy program. This trend has continued, and I am pleased to report that many of the Nation's leading industrial concerns are now working under contracts with the Cancer Chemotherapy National Service Center. These firms are supplying valuable materials for anticancer screening, attempting to develop improved screening techniques, conducting "inplant" screening programs, and manufacturing drugs in large quantities for clinical trials.

On last July 31, the Department of Health, Education, and Welfare adopted a revised patent policy affecting contracts for chemotherapy research. The policy was formulated in collaboration with industry representatives in an effort to encourage greater industrial participation in the drug development phase of the program. The chief difference between this and earlier policy statements lies in the "march-in" provision, which protects the public interest by assuring adequate production of any effective anticancer drug developed through research done under contract to the Chemotherapy Service Center. Any contractor who develops a useful drug must supply adequate quantities of the material at a reasonable price. Should he fail, the Surgeon General of the Public Health Service could assume the right to license additional manufacturers or order the primary contractor to do so.

I am very optimistic about the whole chemotherapy program, as this committee knows. I believe that we are on the right path and that we can expect some really important results to stem from this undertaking.

A more detailed report on the chemotherapy program is being submitted separately for the record.

OTHER RESEARCH ACTIVITIES

Causation

A group of scientists working under a grant from the National Cancer Institute have reported on laboratory studies undertaken to provide additional information on the possible relationship between environmental factors and lung cancer. The studies were designed to administer suspected cancer-producing substances directly into the lungs of animals of a species that does not ordinarily develop lung cancer or pulmonary infections.

In the technique that was developed by these scientists, a carcinogenic hydrocarbon, known as DMBA, and a cigarette tobacco tar condensate were administered repeatedly alone or in combination into a tube leading directly into the lungs of male and female Syrian hamsters. This procedure simulated the manner in which carcinogens might normally reach the lungs. The entire respiratory tract was examined at autopsy for the presence of abnormal growth.

The scientists found that DMBA produced a variety of pathological changes ranging from abnormal multiplications of normal cells to frank cancer. The dose of DMBA administered appeared to be more important than the period of administration. Also, tobacco tar did not produce any pathological changes in this study.

There is a growing body of knowledge, including both laboratory and statistical studies, suggesting that there exists in tobacco tar an agent that is associated with human lung cancer. Another factor, considered to be important in the recent sharp rise of lung cancer, is air pollution in urban communities. One air pollutant that appears to be incriminated is benzpyrene. A group of National Cancer Institute grantees recently reported the results of studies aimed at determining the carcinogenic activity of combinations of tobacco tar and benzpyrene.

The study showed that tobacco tar alone failed to demonstrate marked carcinogenic activity. However, benzpyrene plus tobacco tar, or benzpyrene plus croton oil produced a significantly greater number of benign and malignant tumors than did benzpyrene alone. The investigators feel that these results constitute circumstantial evidence to support the concept that air pollution, together with cigarette smoke inhalation, could reasonably explain the higher incidence of lung cancer among city dwellers as compared with residents of rural communities.

Two important statistical studies of lung cancer mortality were reported last July to the London meeting of the Seventh International Cancer Congress. The Public Health Service, as you know, conducted a survey among 200,000 U.S. veterans over a 2½ year period. Of the 7,000 deaths among this group, a significantly higher mortality rate was observed among regular tobacco smokers than among nonsmokers, and the lung cancer rate for cigarette smokers was about 10 times greater than that for nonsmokers.

Lung cancer occurs in men about 4 to 5 times as often as in women. A 2-year study of the medical and smoking histories of 158 women with diagnosed lung cancer conducted by scientists of the National Cancer Institute showed that of all the factors studied, the only one that correlated with the incidence of lung cancer was cigarette smoking. None of the other items investigated—coffee drinking, occupation, migration, marital status, pregnancy history—was as significant as smoking history in association with lung cancer among these women. A comparison of male and female nonsmokers showed a slight excess lung cancer rate for males similar to the excess mortality for all causes at ages over 35 in the United States. This is evidence that there is no factor that makes men especially more susceptible than women to the risk of developing cancer of the lung.

We know that some occupational groups have a substantially increased lung cancer risk. One such group is composed of workers in the chromate industry, and scientists of our staff are conducting studies designed to identify the agent or factor that causes lung cancer among these workers.

About a year ago, these investigators reported that dusts of crude chromite are deposited in the lungs in a biologically inactive state might be acted upon by body chemicals, causing the slow release of an active form of chromium. More recently, these scientists summarized the results of experiments in which implants of chromite roasts (products of the process of roasting chromite ore) were made in rats either in the pleural cavity or muscle tissue of the right

thigh. All animals surviving an observation period of 2 years were killed and autopsied. The observed occurrence of tumors suggested that chromite ore roast contains chromium in a form that exerts a sufficiently strong and prolonged effect upon exposed tissues to cause cancers. This suggests that lung cancer among chromium workers may be caused in a similar fashion.

Within the past few months, one of our staff scientists reported the results of a comprehensive review of epidemiological data of stomach cancer in the United States and abroad. Among the most important findings reported are these: stomach cancer rates in the United States have declined steadily for both men and women during the past several decades, a trend duplicated in some but not all foreign countries; stomach cancer occurs more frequently among persons in the lower socioeconomic groups but does not seem to be associated with occupation; there is no significant difference in the stomach cancer rates for urban and rural residents; higher rates are found in the Northern United States, paralleling the international trend in stomach cancer distribution.

The scientist reported that none of the available information ruled out the possibility that diet may be associated with the production of gastric cancer. Studies of dietary histories could resolve some apparent inconsistencies in our present information and perhaps pinpoint some food item or combination of items that would help to explain the epidemiological pattern for stomach cancer. The investigator also indicated that a study of the role of heredity may provide valuable information.

I am pleased to report that our environmental cancer research in Washington County, Md., is progressing smoothly. This is the study, you will recall, in which we are attempting to make a comprehensive survey of the possible role of environmental factors in cancer causation. We intend to leave no stone unturned in this search. Such diverse factors as type of dwelling, type of soil, background radiation, and family history are being analyzed to provide leads on the influence of environment on cancer incidence.

On November 14, the Coffman Research Laboratory, Hagerstown, Md., was dedicated and turned over to the National Cancer Institute to provide facilities for this project. The Coffman Laboratory is a gift to the county of Mr. and Mrs. Andrew K. Coffman, of Hagerstown. Use of the building by the Cancer Institute was made possible by the Washington County Public Health Association and the Washington County Health Department. I think this kind of local cooperation is extremely important for the success of an environmental cancer study, because it means that we will receive ample assistance from local medical authorities and, furthermore, from the local population. Without such help, no endeavor of this kind could achieve the desired results. I think this research is off to a very good start and that we can expect some very significant findings to result from it.

CHARACTERISTICS

Institute scientists have reported some interesting results of lengthy investigations of two lines of cells that were derived in tissue culture from a single mouse cell. The two cell lines differ markedly in their ability to produce tumors when injected into mice. The high line cells grow into tumors in 97 percent of the mice into which they are injected, while the low line cells produce tumors in only 1 percent of the mice injected.

Various characteristics of the two cell lines have been studied in an effort to find an explanation for this difference. The scientists found that the lines differ in growth characteristics; the cells of the high line proliferated more rapidly during the first few days after implantation, spread more rapidly into surrounding tissue, and induced enlargement and convolution of nearby blood vessels, which did not occur with the low line cells.

Investigation of the metabolic properties showed that the high line cells utilized approximately three times as much glucose as did the low line cells. Biochemical studies showed still other differences in the makeup of the two lines. The scientists concluded that the low line cells were more nearly like normal cells, while the high line cells had been substantially altered in tissue culture. Thus high line cells may respond differently to some growth restraining influence in mice as a result of their altered metabolic patterns.

Institute studies on water-soluble diets have been profitably continued. These are chemically defined synthetic diets containing all known nutritional

requirements to sustain life. Laboratory animals receiving these diets mate, bear normal, healthy young, and lactate.

With respect to human use the water-soluble diets have been found to be edible and should prove of value in the care of patients with alimentary problems. The diets are particularly significant in that they open the possibility for a completely synthetic diet to be administered to patients who cannot eat. In their present form, the diets offer many possible advantages by virtue of their small bulk, such as economy of storage for civilian defense, arctic habitation, and space travel. Animals fed the diets pass very small amounts of excreta, indicating a further advantage for human use under special conditions.

It has been suggested that removal of a primary tumor hastens the spread of the disease and the growth of secondary lesions. In an experimental approach to this problem, staff scientists carried out a number of studies on mice 3 weeks after they had been injected with tumor cells in a hind leg. Subsequently, the mice were sacrificed and their lungs examined for the presence of metastatic cancer.

The first study showed that in mice on which amputation of a normal leg or no amputation was performed, the frequency and number of metastases were not significantly different. However, removal of the leg bearing the implanted tumor resulted in a significantly increased frequency, number, and size of pulmonary metastases. Removal of the primary tumor at the end of 3 weeks resulted in larger metastases than those observed in mice in which the primary tumor was present for 6 weeks. The investigators concluded from this study that a primary tumor exerts an inhibitory influence on distant metastases and that removal of the tumor acts as a stimulus on the metastatic process.

A second study showed that neither cortisone nor anesthesia administration nor operative procedure had any effect on the number of metastatic lesions in the lungs.

A third study indicated that the anticancer drug TSPA was effective in reducing the number of pulmonary metastases when administered several hours after removal of the primary leg tumor. Metastases were completely prevented in some mice. These investigators feel that their studies in animals closely approximate the clinical situation occurring following surgical removal of a primary tumor.

TREATMENT

The most active area in research on the treatment of cancer continues to be chemotherapy. I would like to summarize briefly a number of developments that are illustrative of progress in the field.

A group of Institute grantees has reported promising results in animal studies of the newly synthesized anticancer drug azauridine. This agent is chemically related to 6-azauracil, which has been used with encouraging results in the treatment of human cancer. Azauridine was found to be significantly more effective than 6-azauracil in inhibiting the growth of three mouse tumors.

In another grant-supported project, four compounds, administered simultaneously, produced marked regression of breast cancers in mice. When these drugs were administered singly, or in any combination of three, the best result achieved was a stoppage of tumor growth. These results support the principle of simultaneously attacking tumor cells by a number of pathways as one means of improving the effectiveness of known anticancer agents.

Scientists of the National Cancer Institute have developed an assay procedure for measuring precisely the effectiveness of anticancer drugs. In general, the procedure involves administering drugs to mice that have far advanced, systemic leukemia. Only drugs possessing a high degree of anticancer activity can significantly prolong the life of such mice; hence this assay is of particular value in the comparison of the therapeutic value of anticancer drugs. These scientists found that a new drug, dichloromethotrexate, is strikingly more effective than its parent compound, methotrexate, in increasing the survival time of leukemic mice. Heretofore methotrexate had been the most effective drug known. This new drug has been placed in preliminary clinical trial under the program of the Cancer Chemotherapy National Service Center.

For the past several years, Institute scientists have reported highly encouraging results of the chemotherapy of a rare form of uterine cancer known as choriocarcinoma. The patients have been treated with the drug methotrexate, administered according to a specially devised, intensive regimen. Within the past few months, these scientists published a progress report on their work,

which I should like to summarize briefly. During the past 2½ years, 27 women have been treated. All but five of them were gravely ill on admission to the Clinical Center. Most of them showed lung metastases, and a few presented evidence of central nervous system involvement.

Complete remissions with no evidence of recurrence for periods of 8 to 29 months were observed in 5 patients. Eleven patients showed remission with persistent manifestation of disease, and the remaining 11 patients died either after initial remission or during initial therapy without response. The investigators conclude that choriocarcinoma and certain related tumors are initially highly sensitive to the drug methotrexate and that substantial clinical improvement can be obtained.

Similar studies are being carried out by National Cancer Institute grantees, who have reported equally encouraging results in this important area of clinical chemotherapy research.

As you know, the drug methotrexate is widely used in the treatment of leukemia and is one of the most effective drugs against this form of cancer. Grantees of the National Cancer Institute have reported the results of a clinical study in which this drug was employed in the treatment of neurological manifestations of leukemia, which heretofore have not responded well to drug treatment. Methotrexate was injected into the cerebrospinal fluid of five leukemic children without serious toxic effect. All five patients experienced clinical improvement of neurological symptoms. Two of the patients who had become paralyzed due to spread of the disease to the central nervous system regained the use of limbs and extremities. Another patient, blind as a result of neurological involvement, regained her sight and was able to play actively. Two patients who were considered refractory to methotrexate showed favorable neurological response after intraspinal drug therapy. This study indicates that the control of neurological manifestations of leukemia by intraspinal injection of chemotherapeutic agents may become a valuable procedure in providing total care of the leukemia patient.

About 18 months ago Institute grantees described the development of a new anticancer drug, 5-fluorouracil, which has now been evaluated in preliminary clinical studies. The drug was administered in adequate therapeutic dosage to 35 patients afflicted with a variety of malignant tumors. Nine of the patients showed objective regression of solid tumors, and the majority of patients treated reported subjective improvement and decrease of pain to such an extent that analgesics were no longer required. Among the types of cancer that responded to the drug were tumors of the breast, liver, rectum, and several other sites. The toxic effects of 5-fluorouracil are of relatively short duration once the drug is withdrawn. Thus far, in patients with solid tumors that have responded to the agent, no development of drug resistance has been observed. Some derivatives of 5-fluorouracil are being developed and studied in preliminary anticancer tests. One of these, 5-fluoro-deoxyuridine, is now in early-stage clinical trial.

CONCLUSION

The program of the National Cancer Institute is continuing to add to the store of knowledge of malignant disease. Much new and valuable information has been gained during the past year, information that I believe brings us closer to the achievement of our goal—the elimination of cancer as a major cause of suffering and death.

Virus research is being intensified and is starting to produce results that may provide a means of preventing human cancer. Our work in cytology and other approaches to the detection of cancer seem to offer the promise that eventually nearly all cases of cancer will be found and brought to treatment before symptoms appear, when the opportunity for complete cure is highest. Our expanded control activities are designed to hasten the day when this objective will be achieved. Finally, chemotherapy research, by far the largest single aspect of the National Cancer Institute program, remains a bright hope for the treatment of malignant disease. In each of these areas, and in fundamental research at the cellular level, our scientists and grantees are making important contributions. I am confident that their efforts will ultimately put an end to the problem of cancer.

I appreciate the attention the committee has given to this discussion. I shall be glad now to answer any questions or assist in further discussions of our activities.

AMOUNT REQUESTED

Dr. HELLER. Mr. Chairman and members of the committee, the activities of the National Cancer Institute continued to expand in the past year, reflecting a general increase in the scope of cancer research throughout the United States and abroad.

Plans for 1960 call for a budget of \$75,218,000 to finance these endeavors which, including the comparative transfer, is the same as the 1959 appropriation, but \$2,407,000 greater than the 1959 obligation plan.

The mounting international character of cancer investigation was amply illustrated by the successful Seventh International Cancer Congress which met last July in London and was attended by some 2,500 members from 63 nations.

1959 ACCOMPLISHMENTS IN VIRUS RESEARCH

Among the most important research accomplishments of the year were the new discoveries pertaining to the cancer virus relationship. Institute scientists, collaborating with investigators of the Division of Biologics Standards, reported that an agent that causes multiple tumors in mice is unquestionably a virus, and that it also induces neoplasms in rats and hamsters.

Further, the scientists developed an immunizing agent 97 percent effective in preventing the growth of tumors in hamsters challenged with the virus.

A group of outstanding scientists recently assembled at the National Institutes of Health to discuss virus-cancer research and recommend steps to facilitate additional fruitful work in this area.

They agreed there is need for more basic virus research, for improved instrumentation, for greater availability in distribution of living host and virus materials, and for training of biologists, zoologists and chemists in fields related to the virus-cancer problem.

A virus-research section has been established in the Laboratory of Biology to strengthen investigations at the Institute, and the National Advisory Cancer Council has recommended that the grant mechanism be modified to provide long-range, interdisciplinary support of research, which could be valuable for further progress in the virus area.

DIAGNOSTIC RESEARCH PROGRAM

Plans for a comprehensive diagnostic research program are being formulated and an ad hoc committee of scientists from such fields as biology, pathology, and electronics has met with members of the staff to discuss the possible course of such a program. It is contemplated that the diagnostic program will be carried out under grants, contracts, and direct operations.

Other scientific developments in cancer detection are: Successful field trials with the cytoanalyzer, promising initial results in an attempt to develop a cytologic test to detect malignant cells in circulating blood, and establishment of a unit in the Bureau of State Services to apply the cytologic test for uterine cancer to the general population.

The Institute is continuing cytology research, particularly in an effort to apply the test to the detection of cancer of other body sites.

Senator HILL. In other words, you hope that this test might prove out to where it would show cancer in any part of the body?

Dr. HELLER. We hope we can achieve the same degree of success in examining cells that sloughed off in other body orifices comparable to that achieved in examining cells from the cervix. This is an attempt—we do not know whether it is possible.

Senator HILL. But you are working toward that end, anyway?

Dr. HELLER. We are working toward that end; yes, sir.

CANCER CHEMOTHERAPY

The program of the Cancer Chemotherapy National Service Center is now in full operation. Clinical studies of some 98 anticancer agents are in progress in 175 to 200 hospitals throughout the country.

Senator HILL. Your prepared statement shows 70 anticancer agents and that should read "98"?

Dr. HELLER. Yes. In the time since we submitted the figure originally, it has been changed.

Contract research constitutes a major part of the program. The role of private industry is increasing and is expected to expand further as a result of the adoption of a liberalized departmental patent policy relating to chemotherapy contracts.

RESEARCH IN CAUSATION AND THERAPY

Within the year important research findings were reported in the fields of cancer causation, characteristics, and therapy.

Staff scientists and grantees have investigated the complex problem of lung cancer etiology and have presented significant new data on the role of smoking, air pollution, occupational hazards, and other factors.

Notable among reported studies of cancer characteristics were investigations of the properties of two strains of mouse cells, derived from a single cell, that differ markedly in their capacity to grow as tumors when injected into mice of the original strain.

Studies on metastasis and on water-soluble diets also contributed valuable information on the nature of cancer.

Research on cancer therapy again produced a number of significant and encouraging developments. Studies in animals and in the clinic provided encouraging new leads that could hasten the development or more effective, perhaps curative drugs for the treatment of cancer.

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960, increased the President's budget by \$8,090,000 for the National Cancer Institute.

As the Secretary indicated, this increase is contrary to the fiscal policy of the President.

However, at the request of the Senate Appropriations Committee, the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Now, I will summarize here and just pick out the highlights.

There was an increase of slightly over \$5 million for research projects designed to carry out the mission of the Cancer Institute in a

variety of fields. These projects are carried on throughout the Nation, and to some extent abroad.

Under "Research fellowships," there was an increase of \$285,000 to support the scientists who are designed to go into research, all research, but we hope a good many will go into cancer research. That is our mission.

Now, on "Training" there was \$1,155,000 in addition provided for this activity. Part of this will increase the training grants for training additional persons in the fields related to cancer.

For field demonstrations and studies the House provided the full amount of \$1,500,000 for projects which will be administered by the Bureau of State Services. This is designed to aid State health departments, and other appropriate agencies, and to assist local agencies, clinics and other such groups in developing programs, primarily concerned with cervical cancer.

Our studies in Memphis, and elsewhere, have indicated that it is thoroughly proper to carry through the field now, on a widespread basis, programs designed to find this cervical cancer, and this is primarily the basis for the new effort.

DEMONSTRATION PROJECTS

Dr. Shannon has just reminded me these are designed as demonstration projects which are traditionally the mission of the Public Health Service in working with local groups, in demonstrating that certain techniques, certain approaches and certain attitudes can be successfully applied in combating disease, in combating a disease in the given community.

Senator HILL. And you would do this in cooperation, we will say, with your local county health unit, perhaps like your chapters of the American Cancer Society, and people like that? It would be part of an educational program to let people know what can be done, and when they are informed as to what can be done they will naturally do the thing?

Dr. HELLER. Yes.

In addition to those agencies mentioned, Mr. Chairman, a great part of them are in medical schools. We found medical schools have been very, very important factors in this sort of work.

USE OF INCREASES IN VARIOUS FUNDS

In research, which is the direct research carried on by the National Institutes of Health, that portion carried on by the Institute has been increased by \$427,000, most of which will be used in the extension of the virus program, tumor cells in circulating blood studies, and an extension of our clinical research activities.

For the review and approval of grants, which is to meet the demands for the increase of funds for research grants, Mr. Chairman, there is a modest increase of \$81,000.

Under the item of "Professional and technical assistance," there was an increase of \$134,000 by the House. The professional technique services area is one in which we have the funds for the Bureau of State Services, direct operations for our chemotherapy program, for certain operations of our field investigations and demonstrations branch, and for items of technical assistance.

This is an increase designed to improve the activities in this area.

Finally, for "Administration", there is an increase of \$8,000.

Mr. Chairman, I will be happy to answer any questions you might have.

Senator HILL. Doctor, you are going forward, of course, with these programs. To continue them you have to have more funds, do you not?

Dr. HELLER. An orderly expansion of a program, Mr. Chairman, we think has been accomplished in an intelligent way over the years, and of course, required more funds and they were reflected in increases which we received; yes, sir.

Senator HILL. Are there any questions?

Senator BYRD. Thank you, Mr. Chairman.

ABILITY TO USE INCREASED FUNDS

I am wondering, Doctor, if more than \$8,090,000 could be effectively used where applied to these programs, were it at your disposal? I notice the House increased the President's budget by that amount, and I have long been interested in this matter of cancer treatment and research, Mr. Chairman, and I have wondered if we have been providing enough funds for the effective carrying out of research in this field.

I am very pleased to see the House increasing the President's budget by that amount. The Doctor has already stated that it could be effectively used. I am wondering if more than that could be effectively used.

Dr. HELLER. Senator, the Congress has been very foresighted, in my opinion, in providing increases over the years, as we have testified to them.

It is our considered judgment that the sum which is allowed here certainly provides for adequate expansion of our program. I think that, as a professional man, it would be less than proper for me to say that of course more funds can be used in any program. On the other hand, I would submit that the funds which are available to us enable us to carry on our program in an orderly, proper, and intelligent manner, and enable us to consolidate the gains which we made in the research support to see what effect these programs are having upon the general improvement of cancer treatment—the decrease in cancer mortality, and the improvement generally in the findings which result from the laboratories over all parts of the world.

I would say, sir, this increase provides us with an adequate amount of funds to meet the challenges.

As I said before, obviously more could be used, but we would believe, sir, that this enables us to do a first-class job.

COMMENDATION OF NIH

Senator BYRD. Mr. Chairman, our committee should be sympathetic toward this increase which the House has written in, and I personally am very much in favor of going along with it. I trust we will never become niggardly in our approach to this very important field of research. I want to take this opportunity to commend the National Institutes of Health and compliment Dr. Shannon and those who work with him on the excellent work that they have been doing.

I think that we can look at the National Institutes of Health with tremendous pride, Mr. Chairman, and I feel that much of the praise should go to you and to other members of this committee who have worked in previous years to help make this dream come to fruition.

DISTRIBUTION OF HEALTH SURVEY REPORTS

I am a little bit, perhaps, off the subject at this particular moment, but I was wondering a little while ago why the results of this important survey, which are in the form of reports, are sold by the Government Printing Office? It seems to me that they should and could be effectively distributed by the Public Health Service without cost. I cannot see any reason for putting a price on them when the Surgeon General could carry that out.

Dr. BURNES. Mr. Chairman and Senator Byrd; I would like Dr. Stewart to perhaps supplement my statement, but it is my understanding, sir, that we have not had, up to the present time, the funds that we felt were completely adequate to carry out the national health survey as enacted by the Congress, and if we use some of our funds to print this, print these documents as they come out—and I realize they are extremely important, sir, to all groups—that then we would have to divert funds from the services necessary to carry out the operating part of the program.

I would like to have Dr. Stewart indicate whether my statement is correct or incorrect on that.

Dr. STEWART. Yes, sir, Doctor. That is correct.

Senator HILL. Are there any questions, Senator?

Senator BYRD. I have nothing more except to say that that seems to bear out my fear that the Congress has been a little parsimonious in this particular field, and maybe we could be a little more so in other fields rather than this.

Senator HILL. Yes.

Dr. Stewart, would you want to make some further comment?

Dr. STEWART. I think the Senator should understand that we do give away many copies of these reports. We furnish them to people that we know are going to use them, such as your medical schools, libraries, various consumer groups, and then the others are put on sale.

Senator BYRD. Thank you, Mr. Chairman. I trust that the questions which I asked with some timidity will not be impertinent.

As a newcomer, I am fearful that I might ask questions that are irrelevant or elemental.

Senator HILL. I think they are very germane, as a lawyer, may I say, very appropriate, Senator.

Senator BYRD. Thank you.

Senator HILL. I am very happy that you asked them.

I might say, as you have heard me express myself before, I share in the tribute which you paid here today to the NIH and their work.

I might say that at the last session of the Congress, this subcommittee recommended an increase of \$101 million in the funds for the NIH. That recommendation was concurred in by the full Appropriations Committee and was then adopted by the Senate.

It went to conference in the House and we were able to hold in the conference committee \$75 million of the increase of \$101 million; so I

think there can be no question—I do not know because I can only speak for one member of the subcommittee—there will be no question about any lessening of these increases. The question may well be that further increases may be justified here.

Now, is there anything else, Senator? I am certainly glad you asked the questions you did.

Senator BYRD. Thank you, Mr. Chairman.

Senator HILL. Is there anything else that anybody else would like to add?

Dr. HELLER. I have nothing, except to say that I thank the committee and you, sir.

MENTAL HEALTH ACTIVITIES

STATEMENT OF DR. ROBERT H. FELIX, DIRECTOR, NATIONAL INSTITUTE OF MENTAL HEALTH; ACCOMPANIED BY DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“For expenses necessary for carrying out the provisions of sections 301, 302, 303, 311, 312, and 314(c) of the Act with respect to mental diseases, **[\$52,419,000] \$5,384,000.**”

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate-----	\$52, 419, 000	\$52, 384, 000	\$60, 409, 000
Deductions:			
Comparative transfer to “Assistance to States, general, Public Health Service”-----	—35, 000	0	0
Unobligated balance, estimated savings-----	—2, 411, 000	0	0
Total obligations-----	49, 973, 000	52, 384, 000	60, 409, 000

Obligations by activities

Description	1959 appropriation		1960 budget estimates		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Grants:						
(a) Research projects-----		\$16, 929, 000		\$18, 803, 000		\$22, 176, 000
(b) Research fellowships-----		1, 145, 000		1, 286, 000		1, 396, 000
(c) Training-----		18, 213, 000		18, 213, 000		21, 206, 000
(d) State control programs-----		4, 000, 000		4, 000, 000		5, 000, 000
2. Direct operations:						
(a) Research-----	450	6, 676, 000	450	6, 941, 000	462	7, 172, 000
(b) Review and approval of grants-----	81	885, 000	81	916, 000	93	1, 065, 000
(c) Training activities-----	8	100, 000	8	100, 000	8	100, 000
(d) Professional and technical as- sistance-----	161	1, 585, 000	161	1, 669, 000	169	1, 838, 000
(e) Administration-----	50	440, 000	50	456, 000	50	456, 000
Total obligations-----	750	49, 973, 000	750	52, 384, 000	782	60, 409, 000

Obligations by objects

Object classification	1959 appro- piation	1960 budget estimate	1960 House allowance
PUBLIC HEALTH SERVICE			
Total number of permanent positions.....	745	745	777
Full-time equivalent of all other positions.....	39	39	41
Average number of all employees.....	680	698	721
Number of employees at end of year.....	776	856	886
01 Personal services.....	\$4, 854, 800	\$5, 003, 800	\$5, 197, 800
02 Travel.....	332, 800	335, 800	366, 300
03 Transportation of things.....	19, 700	19, 700	22, 200
04 Communication services.....	58, 900	58, 900	58, 900
05 Rents and utility services.....	18, 700	18, 700	18, 800
06 Printing and reproduction.....	25, 700	25, 700	26, 600
07 Other contractual services.....	351, 300	362, 300	433, 300
Reimbursements to "National Institutes of Health management fund," Public Health Service.....	3, 098, 000	3, 280, 000	3, 430, 000
08 Supplies and materials.....	386, 500	406, 500	433, 500
09 Equipment.....	344, 700	365, 700	428, 200
11 Grants, subsidies, and contributions.....	40, 237, 000	42, 252, 000	49, 728, 000
Contribution to retirement fund.....	199, 500	208, 500	219, 000
13 Refunds, awards, and indemnities.....	200	200	200
15 Taxes and assessment.....	25, 200	26, 200	26, 200
Subtotal.....	49, 953, 000	52, 364, 000	60, 389, 000
Deduct quarters and subsistence charges.....	5, 000	5, 000	5, 000
Total, Public Health Service.....	49, 948, 000	52, 359, 000	60, 384, 000

ALLOCATION TO SAINT ELIZABETHS HOSPITAL

Obligations by objects

Total number of permanent positions.....	5	5	5
Average number of all employees.....	5	5	5
Number of employees at end of year.....	5	5	5
01 Personal services.....	\$21, 000	\$21, 000	\$21, 000
04 Communication services.....	1, 700	1, 700	1, 700
07 Other contractual services.....	100	100	100
08 Supplies and materials.....	1, 000	1, 000	1, 000
11 Contribution to retirement fund.....	1, 200	1, 200	1, 200
Total, Saint Elizabeths Hospital.....	25, 000	25, 000	25, 000
Total obligations.....	49, 973, 000	52, 384, 000	60, 409, 000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	756	\$52,419,000
Transfers: Comparative transfer to "Assistance to States, general, Public Health Service".....	-6	-35,000
Adjusted 1959 appropriation.....	750	52,384,000
Deduct unobligated balance, estimated savings.....		-2,411,000
1960 base.....	750	49,973,000
1960 appropriation request.....	750	52,384,000
Net change requested.....	0	+2,411,000

	1960 budget estimate		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount
Decreases: Absorption within personal services to offset extra day of pay.....		\$15,881		\$15,881
Increases:				
For mandatory items:				
Annualization of 41 new positions authorized in 1959 for part of year (1959—authorized for 60 per- cent of year).....		214,000		214,000
Extra day of pay (261 days in 1959 and 262 days in 1960).....		15,881		15,881
Subtotal mandatory increases.....		229,881		229,881
For program items:				
Research projects.....		1,874,000		5,247,000
Alcoholism.....				(385,000)
Psychopharmacology.....		(1,874,000)		(2,500,000)
Title V.....				(1,000,000)
Research fellowships.....		141,000		251,000
Physiology.....		(56,000)		(100,000)
Training.....				2,993,000
General practitioner.....				(250,000)
Research training.....				(243,000)
State control programs.....				1,000,000
Direct research in Clinical Neuropharmacology.....			6	72,000
Direct research in biometrics.....			6	52,000
Review and approval functions.....			12	106,000
Consultants in special areas and technical assistance projects.....			8	169,000
Net change in reimbursement to "National Institutes of Health management fund".....		182,000		332,000
Subtotal program increases.....	0	2,197,000	32	10,222,000
Total changes requested.....	0	2,411,000	32	10,436,000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960, increased the President's budget by \$8,025,000 for "Mental health activities." At the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Activity No. 1(a)—Research projects

The full amount requested of \$18,803,000 was allowed by the House, and in addition it provided an increase of \$3,373,000 for expansion of the psychopharmacology program, the mental health projects program (title V), and the regular research projects program. This is an increase of \$5,247,000 over the 1959 appropriation.

Activity No. 1(b)—Research fellowships

The full amount requested of \$1,286,000 was allowed by the House, and in addition it provided an increase of \$110,000 for additional research fellowships. This is an increase of \$251,000 over the 1959 appropriation.

Activity No. 1(c)—Training

The full amount requested of \$18,213,000 was allowed by the House, and in addition it provided an increase of \$2,993,000 for additional general practitioner and research training grants. This is an increase of \$2,993,000 over the 1959 appropriation.

Activity No. 1(d)—State control programs

The full amount requested of \$4 million was allowed by the House, and in addition it provided an increase of \$1 million for expansion of this program. This is an increase of \$1 million over the 1959 appropriation.

Activity No. 2(a)—Research

The full amount of \$6,941,000 and 450 positions was allowed by the House, and in addition it provided \$231,000 and 12 positions for expansion of clinical neuropharmacological and biometric studies and increased research supportive services. This is an increase of \$496,000 over the 1959 appropriation.

Activity No. 2(b)—Review and approval of grants

The full amount of \$916,000 and 81 positions was allowed by the House, and in addition it provided \$149,000 and 12 positions for additional staff to service the expanded grant activities and for increased review and approval supportive services. This is an increase of \$180,000 over the 1959 appropriation.

Activity No. 2(d)—Professional and technical assistance

The full amount requested of \$1,669,000 and 161 positions was allowed by the House, and in addition it provided \$169,000 and 8 positions for additional consultants in special areas and additional technical assistance projects. This is an increase of \$253,000 over the 1959 appropriation.

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

Allocations of grant-in-aid funds for mental health

State or Territory	1958 allocations	1959 allocations	Estimated 1960 allocations	State or Territory	1958 allocations	1959 allocations	Estimated 1960 allocations
Alabama.....	\$81,200	\$79,700	\$79,200	New Hampshire...	\$25,000	\$25,000	\$25,000
Alaska.....	25,000	25,000	25,000	New Jersey.....	110,200	112,600	113,200
Arizona.....	25,000	25,000	25,000	New Mexico.....	25,000	25,000	25,000
Arkansas.....	48,800	46,600	45,500	New York.....	331,900	319,700	319,600
California.....	274,100	278,900	282,200	North Carolina...	110,500	110,200	109,600
Colorado.....	35,000	35,800	36,200	North Dakota....	25,000	25,000	25,000
Connecticut....	44,500	44,100	44,500	Ohio.....	190,400	189,500	189,500
Delaware.....	25,000	25,000	25,000	Oklahoma.....	52,000	51,900	51,200
District of Columbia.....	25,000	25,000	25,000	Oregon.....	37,000	37,600	37,300
Florida.....	85,400	90,700	96,600	Pennsylvania....	234,700	232,700	229,900
Georgia.....	90,900	90,600	90,000	Rhode Island....	25,000	25,000	25,000
Idaho.....	25,000	25,000	25,000	South Carolina...	60,500	60,200	60,400
Illinois.....	193,000	193,900	195,800	South Dakota....	25,000	25,000	25,000
Indiana.....	94,700	95,700	95,300	Tennessee.....	86,300	84,400	82,800
Iowa.....	60,100	61,800	61,600	Texas.....	201,600	202,800	204,400
Kansas.....	46,500	46,600	45,700	Utah.....	25,000	25,000	25,000
Kentucky.....	74,700	73,800	73,600	Vermont.....	25,000	25,000	25,000
Louisiana.....	72,600	72,600	72,000	Virginia.....	83,700	85,400	87,300
Maine.....	25,000	25,000	25,000	Washington.....	56,200	56,500	56,700
Maryland.....	59,300	60,000	60,500	West Virginia...	48,200	47,200	45,900
Massachusetts...	101,000	100,300	98,400	Wisconsin.....	81,700	82,800	83,400
Michigan.....	156,500	159,900	159,200	Wyoming.....	25,000	25,000	25,000
Minnesota.....	72,000	72,700	72,600	Hawaii.....	25,000	25,000	25,000
Mississippi.....	60,500	60,900	60,000	Puerto Rico.....	64,500	63,200	62,700
Missouri.....	93,200	91,600	90,400	Virgin Islands...	25,000	25,000	25,000
Montana.....	25,000	25,000	25,000	Guam.....	25,000	25,000	25,000
Nebraska.....	31,600	32,100	31,800				
Nevada.....	25,000	25,000	25,000	Total.....	4,000,000	4,000,000	4,000,000

TRIBUTE TO DR. FELIX

Senator HILL. Our next subject will be presented by Dr. Felix, Director of the National Institute of Mental Health.

Doctor, I understand you are the president-elect of the American Psychiatric Association. I want to congratulate you, sir, on behalf of the committee.

Dr. FELIX. Thank you, Mr. Chairman.

Senator HILL. We are very proud and happy to hear that. I think Senator Byrd will be happy to concur in that.

Senator BYRD. Absolutely.

Dr. FELIX. I think it is as much a tribute to the National Institutes of Health as it is to me as a person, and I do not think I should take that as a personal compliment but rather as one of all of the staff who worked so hard on this program.

Senator HILL. You have always been very modest and very generous and we are very proud that you are going to be the new president.

Dr. FELIX. Thank you, sir.

PREPARED STATEMENT

Senator HILL. Now you have a prepared statement, I believe, Doctor?

Dr. FELIX. Yes, Mr. Chairman, I have, which I can submit for the record and then I will give a summary of it, if you wish.

Senator HILL. All right, sir.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, NATIONAL INSTITUTE OF MENTAL HEALTH, PUBLIC HEALTH SERVICE ON MENTAL HEALTH ACTIVITIES, PUBLIC HEALTH SERVICE

Mr. Chairman and members of the committee, the budget proposed for mental health activities is \$52,384,000 which with the comparative transfer is the same as 1959, but \$2,411,000 greater than the 1959 obligation plan.

A review of the research conducted and supported by the Institute during the past year shows increasing emphasis on studies of the brain and its function as an important element in understanding behavior. A dramatic example of this trend in mental health research was provided by a recent scientific television show produced on the CBS Conquest Hour. This show depicted investigations linking neurophysiological structure and function with total behavior. It is obvious that important advances in the campaign against mental illness will come from improvements in our conceptions of how the brain and central nervous system operate, and of how these operations correlate with their observable manifestations—man's actions, his personality, and his social relationships. Scientists doing basic laboratory and clinical research have been improving steadily and increasing the number of tools and techniques at their disposal, and have accumulated useful knowledge about extremely complex physiological and biochemical processes. Behavioral scientists and investigators conducting clinical studies have added new methods to their armamentarium and substantially increased our understanding of basic psychological mechanisms. Both basic and clinical researchers in mental health are now reaching a stage at which they can fruitfully combine efforts to comprehend common problems and to synthesize and interrelate their respective findings.

Investigators in Europe and in this country, some of them assisted by National Institute of Mental Health grants, are continuing highly significant experiments which relate central nervous system mechanisms to motivation and drive. They have shown that specific areas of the brain can be activated electrically or, in some cases chemically, to elicit behavior directed to the satisfaction of specific drives. The drives so generated can be used to lead the animal to utilize its intellectual and physical resources in goal-seeking activities. One of these investigators, exploring the separate elements of conflicting drives, has developed a framework for what may prove to be a highly effective approach to the evaluation of the psychological effects of drugs on animals. An Institute investigator is making impressive progress toward characterizing the specific brain loci responsible for activities that contribute to the individual's survival and his part in survival of the species.

Disorders of thyroid metabolism have long been known to be related to various forms of retardation. Institute investigators have made progress this year in exploring the metabolic pathways that destroy and change thyroxine—the active hormone involved in this process. Other Institute scientists have been recording the electrical activity of the brain during sleep and the process of awakening, and have discovered differences which may account in part for dream activity. These studies are basic to our understanding of the physiology of sleep as well as of preception, attention, and memory.

The Institute's opportunities for interdisciplinary research have made it possible for us to exploit the new techniques available for reexploring relations between bodily structure and functioning. Increasing attention is being given to studies at the borderlines between psychology, chemistry, and physiology in the laboratories of the National Institute of Mental Health. An interdisciplinary study of human aging, conducted by a team of Institute psychologists, psychiatrists, sociologists, and biological scientists, is now in the data analysis stage. One finding of this study discloses a parallel relationship between the individual's cerebral metabolism and his ability to cope with his environment. The Institute is also beginning studies on endocrine function associated with psychological stress.

The official opening during the past year of the Institute's Clinical Neuropharmacology Research Center, in cooperation with Saint Elizabeths Hospital, adds to the opportunities for combined basic clinical research. Here psychiatrists, psychologists, pharmacologists, biochemists, physiologists, and other research specialists will conduct a broad program of studies, including a systematic survey of suitable population samples, with special reference to the impact of pharmacotherapies on the existing services of a mental hospital. This includes research designed to measure changes in hospital management and care brought about by the use of the drugs, and how such environmental changes in turn affect the symptoms of illness in the patient. The center will also carry on human studies in intermediate metabolism in order to establish biochemical correlates of reaction patterns, and will examine the effects of drugs on enzymatic processes concerned in the synthesis, storage, and release of neurohumoral agents within the brain. The center will conduct human psychological studies, particularly on the processes of attention, perception, sensory discrimination, and learning. An attempt also will be made to establish objective measures of those aspects of thought disorder which are characteristic of the schizophrenic syndrome and which are measurably affected by drugs.

Increased interdisciplinary research by investigators outside the Institute is being supported through the grants program. The policy of providing assistance to large program-type research efforts, which particularly lend themselves to combined clinical and laboratory studies, continues to be implemented. In recognition of the need to develop increased numbers of investigators qualified to carry on research which cuts across several areas of disciplinary specialization, the Institute last year initiated additional programs of support for training in the biological and behavioral sciences. Support for training in mental health disciplines is now available to biological and behavioral scientists who wish to bring their research talents to the field of mental health. Support is also now available to enable mental health professionals to receive training in biological and behavioral sciences so that they can bring their rich clinical experience to bear on research problems.

I have emphasized some of the developments in cross-disciplinary efforts in mental health because I feel that cooperative basic clinical research holds the most exciting promise for future progress against mental illness. The influence of this trend can be seen in virtually all the important areas with which the Institute is concerned.

RESEARCH GRANTS

This year saw substantial increases in the number of investigations on problems of schizophrenia, alcoholism, mental retardation, and psychopharmacology. A heavy share of the research grants program has continued during 1959 to support studies concerned with developing improved methods of care, treatment, and prevention of mental illness, and with such basic problems as the biology and biochemistry of mental illness, the role of psychological and social factors in normal and abnormal behavior, child development, the epidemiology of mental illness, and such problem areas as juvenile delinquency, aging, and school mental health.

In the field of alcoholism, program stimulation has resulted in the submission and approval of new and promising research grants. Current projects range from studies of the basic metabolic factors in alcoholism to attempts to improve treatment methods for alcoholics in outpatient clinics. Other studies include the effect of alcoholism on a person's physical and mental health, the relation between alcoholism and personality, and a cross-cultural investigation of the prevalence of alcoholism.

A substantial amount of research in juvenile delinquency is being supported by the Institute, including such studies as the relation between community structure and delinquency, intrapersonal factors in juvenile delinquency, family factors in delinquency, the rehabilitation process in reformed offenders, and a study of the development of self-control in children. Several studies of the psychological and physiological effects of the addictive drugs have underlined quite dramatically the relation of delinquency to addiction and the importance of the transitional period from adolescence to adulthood as the key period for effecting long-range changes. Because of the desirability of studying these two problems simultaneously, the next step is the development of a demonstration project in this joint area.

Several of the grant-supported research projects in mental retardation have reported findings. At Bellevue Medical Center in New York one grantee has announced the possible development of a synthetic amino acid diet to correct "maple sugar urine disease," a condition characterized by early and rapid mental deterioration associated with a marked maple sugar odor in the urine. An Institute grant to the Pacific State Hospital is supporting a study of the impact of institutionalization on the mentally retarded. Preliminary findings indicate that physical rehabilitation programs help increase the patients' readiness for discharge. Improved patterns of ward management also result in improved discharge rates, irrespective of changes in the patients' I.Q.'s. The grant to the National Association for Retarded Children for a study of the etiology of mental retardation resulted in a major report. Published early in 1958 in two separate monographs, it since has been republished in book form for wide distribution. In addition, Institute staff have taken active steps to develop leadership in professional organizations working in the field of mental retardation.

The National Institute of Mental Health has joined with other institutes in supporting several large interdisciplinary program grants in aging. In addition, it independently supports other research on aging, such as the effect of aging on the central nervous system, the treatment and prevention of senile arteriosclerosis, better methods of measuring the health of the aged, psychiatric rehabilitation of older persons, the effects of retirement, and a variety of other aspects of the aging process. Several groups of researchers are engaged in developing psychological tests for use with the aged.

Studies in basic research constitute at least half of the total mental health research grant program. The broad spectrum of research being underwritten in psychophysiology includes such projects as endocrinological determinants of behavior, studies of autonomic response patterns, and relations between attitude and physiological change. At the University of Michigan's department of psychology, research is being supported on brain functioning. Extending techniques of self-stimulation through implanted electrodes in the brains of rats, the investigator has helped to extend brain mapping into the area of clearly defined motivational functions. This research is typical of a number of current research studies on motivation and reward, which ultimately may have wide clinical, social, and educational implications.

PSYCHOPHARMACOLOGY

This past year saw a 100-percent increase in Institute-supported research in psychopharmacology. This has resulted from increased nationwide interest in psychopharmacology research, availability of more funds, and active stimulatory efforts by the staff. Equally significant is the fact that, in the judgment of the Institute's advisory bodies, clinical research in this field is steadily improving in quality. It is apparent that an educative process has been taking place as a result of the focus on well-designed clinical studies. This change in level of sophistication of the research means that all the results can be accepted with much more confidence and that the clinical use of the psychiatric drugs will be based on much sounder data.

Progress was made in the area of new drug development. Several new agents are now available in the treatment of depression. These include the energizers

iproniazid, orphenadrine, and imipramine. The latter compound is not a stimulant or a tranquilizer, but may be related to some of the psychotomimetic substances which produce transient symptoms similar to mental illness. Two potent and structurally quite different groups of psychotomimetic drugs were developed in the past year. One group produces a much more potent and disturbing "psychotic" state than either LSD or mescaline; the other disorganizes thought and produces dramatic disturbances of body image. The Institute is now supporting two studies which have as their major objective the identification of useful new drugs, and a number of other grant applications of this nature are awaiting review.

The research being done in psychopharmacology ranges from clinical testing of drugs to synthesis of new compounds. Definitive studies of the clinical efficacy of drugs have more than doubled during the past year. The Institute is now supporting 27 clinical projects designed to evaluate 17 different psychiatric drugs. The trend in the past year has been toward greater diversification of drug testing among patient groups, increased interest in gaging the efficacy of drugs in maintaining patients in the community, and improvement of methods for evaluating clinical improvement.

Because of the large numbers of persons suffering from schizophrenia, special emphasis has been placed on evaluating the usefulness of psychopharmacologic treatment. Twenty-seven projects on drugs and schizophrenia are now being supported; 17 are concerned specifically with chronic schizophrenics who have been in the hospital for many years, and 10 are studying drug therapy for acute patients with recent onset of illness. Most of this research is being done in hospitals.

Evaluation of the effects of drugs on children is needed. As was emphasized at a recent conference on child research in psychopharmacology sponsored by the Institute, there is virtually no systematic knowledge of drug effects on the behavior of children. The increased funds received in 1959 enabled the Institute to support three new studies of drug effects in children. These studies, being conducted in both hospital and outpatient clinics, include evaluations of drug effectiveness in alleviating anxiety and in controlling hyperactivity, and investigations of the effects of chlorpromazine on learning ability and memory.

The Institute is organizing cooperative clinical trials to test new drugs systematically as soon as they are released by the Food and Drug Administration. This program is beginning with a pilot study at St. Elizabeths Hospital, after which two more hospitals will be added to the trials. Comparing the data from these three hospitals will show whether consistent results are being obtained. If this preliminary work shows promise, additional hospitals and clinics will then be added, with each group of three hospitals evaluating three drugs and a placebo. This program will not only produce information about the clinical effectiveness of drugs, but will also build up a core of investigators trained in psychopharmacological research who will be able rapidly to evaluate new drugs as they become available. A detailed report of the activities of the Institute's Psychopharmacology Service Center is being provided in a separate document.

NATIONAL INSTITUTE OF MENTAL HEALTH LABORATORY RESEARCH PROGRAM.

Multidisciplinary basic research on fundamental problems of physiology and the relation of physiological function to behavior continue to provide the theoretical basis for the Institute's intramural basic research program. In the field of cellular pharmacology, work was concentrated during the past year on studies on biological methylation, amino acid metabolism, protein synthesis, and comparative biochemistry. Research in physical chemistry centered on the structure and physical chemistry of the nucleic acids, the large molecules found in the nucleus and cytoplasm in all cells which are believed to be the material responsible for transmitting genetic information from one generation to the next.

Institute researchers in neurophysiology are investigating biochemical differences in various parts of the brain; using animals ranging from mouse to monkey. Since specific chemical poisons (antimetabolites) affect different regions according to the local dominance of differing metabolic processes, they provide a useful tool for distinguishing and differentiating between functional biochemical systems. This research contributes to basic knowledge of the brain mechanisms and has specific implications for studies of alcoholism and drug addiction. Institute neurophysiologists also are pursuing research on the limbic system, part of the phylogenetically old brain which is yielding new concepts related to the basis of emotional experience and expression.

Among advances made during the past year was the identification of the enzyme responsible for inactivation of epinephrine and norephrinphrine, two neuro-humoral agents which play an important part in the functioning of the nervous system. Such mental subnormalities as cretinism may be explained by recent animal and test tube experiments which have demonstrated the action of thyroid hormone in protein synthesis, probably the major mechanism of action of this hormone. This finding accounts for the effects of thyroid hormone on the metabolic rate and helps to explain many of the clinical features of hyperthyroidism, including the retarded development of the body and brain in cretinism.

Studies on the neurophysiological mechanisms involved in sensory input and perception have revealed part of the complex relationships between the reticular formation (located in the brainstem region of the old brain) and sensory circuits. The reticular formation participates in the physiological events responsible for wakefulness and sleep, focus of attention, habituation, and governs the control of sensory input.

The Institute's laboratory research in the work of psychology of the aging process has progressed from nerve conduction and reflex timing to comparisons of higher thought processes, with emphasis on those variables related to adaptiveness of the individual. Animal behavior research has concentrated on (a) comparing the behavior subsumed by the frontal and temporal lobes in monkey, chimpanzee, and man, and (b) analyzing particular aspects of the neural substrates of this behavior. Other animal experiments aim at developing principles of building physical and social impositions into the environment which will lead to cooperative or competitive behavior over which the animal has no choice or control.

The Institute's Addiction Research Center at Lexington, Ky., continued its national and international role in defining the addictive properties of new drugs which it analyzes for theoretical research purposes as well as for protection of the public. During the year eight new analgesic drugs were tested. Evidence and conclusions relating to five of these were submitted to the National Research Council Committee on Drug Addiction and Narcotics. In its work on the psychology of addiction, the center has been attempting to develop an experimental analogue in rats of "relapse" to the use of narcotic drugs by man. Much progress has been made on the construction of an inventory for assessing the subjective effects of several different classes of drugs of interest to the center (opiates, hypnotics, psychotomimetics, tranquilizers, and stimulants). This project has implications for psychopharmacology and is directed toward providing a more objective measurement of the mental effects induced by drugs.

A number of the center's studies are related to alcoholism, including a comparison of the habits and attitudes of alcoholics with those of addicts; a comparison of personality test patterns of alcoholics, addict prisoners, and addicts on opiates; effects of drugs on learning; the effects of drugs on sensitivity to various classes of stimuli; and the neurophysiology of chronic intoxication with hypnotic and sedative drugs.

NATIONAL INSTITUTE OF MENTAL HEALTH CLINICAL INVESTIGATIONS PROGRAM

During the past year, significant developments occurred in the Institute's clinical investigations program, including the establishment of the collaborative research program with St. Elizabeths Hospital (Clinical Neuropharmacology Research Center). In addition, plans for a field study of factors involved in successful adaptive behavior to normal like stresses are nearing implementation. These clinical and field studies are supported by appropriate laboratories where the data gathered by observation, therapy, and clinical trial can be amplified and extended.

The Institute's work with hostile aggressive children has contributed significantly to the understanding of the impact of milieu on behavior, of the development of impulse control, and methods of treatment based on psychodynamic principles. Results of this research are now being prepared for publication and will be available in the near future.

During the past year, the work in adult psychiatry has approximately doubled. New directions have been charted for research, and extensive long-range planning has been undertaken. The various projects are being carried out by psychiatrists and by research workers in psychology, sociology, physiology, and other related fields. Work is being done not only in the hospital,

clinic and laboratory, but in field settings as well. Greater attention is being given to method than has been characteristic of psychiatric research, with major focus on basic processes relevant to many important problems of human behavior. Two new sections organized during the past year, one on psychosomatic medicine, the other on personality development, represent two aspects of a broad program of research on stress and adaptation. A major part of the work in adult psychiatry carried on by the Institute includes research on psychotherapy and a number of studies on schizophrenia. The research in schizophrenia conducted by Institute investigators is described in a later section.

During the past year the first substantial steps were taken toward implementing the Clinical Neuropharmacology Research Center's program in its permanent quarters in the William A. White Building of St. Elizabeths Hospital. The center will maintain active and sustained collaboration with the other Institute laboratories.

Psychologists in the Institute's clinical investigations program have been working on the observation and identification of basic processes of behavior development and personality formation in early infancy. Research in this area will contribute useful data for the purpose of developing more informed and more adequately documented theories of development in early childhood, and of the relations between these early characteristics and mental health and pathology at subsequent ages.

Plans have been developed for an intensive study of creativity, a field which has many theoretical and practical implications. As presently conceived, this research would place primary emphasis on discovering those personality and environmental conditions most conducive to the functioning of creative effort.

SCHIZOPHRENIA: EXTRAMURAL AND INTRAMURAL PROGRAMS

Current concepts regard schizophrenia not as a unitary disease process, but as a group of diseases not necessarily related to each other and involving the interaction of multiple factors—genetic, sociocultural, psychological, and biological. The Institute's grant program has supported an increasingly wide variety of research in all these fields, as well as a series of clinical studies of schizophrenia. Much of the psychopharmacology grant program is directly related to research in schizophrenia. One National Institute of Mental Health grantee has recently reported on the use of a new drug, trifluoperazine (Stelazine), in the rehabilitation of chronic schizophrenic patients.

Other grantees are investigating the uses of social therapy and rehabilitation centers in maximizing the effectiveness of drug therapy. The results of one study suggest that patients who are moved from an inactive atmosphere of chronicity to an environment where active treatment is given profit more from drugs than do patients who remain in the chronic atmosphere. This study also points to the need for halfway houses and other forms of posthospital care.

Five projects now underway are investigating the problem of maintaining schizophrenic patients in the community. Individual treatment programs are planned for each patient, some of them receiving drugs as needed. Patients attend mental hygiene clinics, receive home visits from Public Health nurses, attend day-care centers, or receive other hospital rehabilitation procedures. These research projects should provide valuable information on the most effective means of preventing rehospitalization among patients released from hospitals after drug treatment. One study is designed to learn whether schizophrenic patients can be treated successfully at home if drug therapy is given under proper supervision. If it is shown that these patients can remain at home rather than be committed to a hospital, it may be possible to effect great changes in treatment procedures for the mentally ill and reduce the tremendous economic burden of maintaining large State hospitals.

A number of grant-supported biochemical and neurophysiological studies related to schizophrenia are concerned with the detection of substances, produced by the body's physical and chemical processes, which may be causal agents in the development of schizophrenia. Parallel with this is an attempt to find biochemical abnormalities which might be correlated with psychological abnormalities.

Institute investigators are pursuing studies of the behavioral and biochemical correlates of the electroencephalogram in schizophrenia. Further work on theories with respect to disturbances in the circulation and energetics of the brain in schizophrenia has confirmed earlier evidence that there is no abnor-

malinity either in circulation or total oxygen consumption of the brain in schizophrenia.

A major area of research in the Institute deals with family relations in schizophrenia. Perhaps the single point on which there has been the greatest agreement, at least at the level of clinical impression among workers in this field, is that there is some sort of gross defect or abnormality of a psychosocial nature in the families of schizophrenic patients.

Progress during 1958 in work on family studies included: (1) enlargement of the number of families of schizophrenics studies; (2) beginning of clinical comparison studies with the families of nonschizophrenics; and (3) development of new clinical methods, such as family therapy, in which parents, the patient, and siblings are seen together and their transactions are observed directly and studied diagnostically through a psychotherapeutic approach.

In addition to the kinds of research projects and investigations described above, the Institute is currently supporting, under its mental health project grants program, a large number of experiments, demonstrations, and studies designed to develop improved methods of diagnosis, care, treatment, and rehabilitation of schizophrenic patients.

TRAINING

Although progress has been made in increasing the number of persons trained in a variety of mental health disciplines, we are still faced with serious shortage areas. Since its inception, the Institute's training program has been dedicated to stimulating an increase in both the quality and quantity of professional personnel in the mental health disciplines. Until 1958 emphasis was primarily on training clinical personnel. This is an area where the needs remain immediate and critical. We are therefore continuing to strengthen this program. Beginning in 1958, the training program entered into a new phase of its development with the expansion of research training and the inauguration of two new programs.

Research training

The research fellowship program was markedly expanded in the current fiscal year. In line with congressional recommendations, a substantial share of the increased funds has been awarded for research fellowships in the field of physiology.

Currently available support for research training includes: grants to four medical schools for the development of interdisciplinary training, particularly the research aspects of training for biologic and social scientists in the field of mental illness so that there will be a broader approach to the solution of the problems of mental health and mental illness; medical student stipends for extra-curricular clinical or research activities in psychiatry; research training on a graduate level in psychology. In this latter program 23 new grants were awarded during 1959 in 9 areas of psychology.

Other new programs

As early as 1947, the Institute recognized the need for sufficient psychiatric training to enable physicians to deal more effectively with the emotional problems of health and illness. By 1950, grant support in the undergraduate training program was provided to expand psychiatric curriculum in nearly half of the medical schools. At present all medical schools provide this training. Since no provision was made for the physician who graduated prior to 1950, a few grants were awarded during the last 10 years for postgraduate institutes and workshops for groups of general practitioners and other physicians in practice. Those pilot efforts have been most successful.

Public interest in psychiatric training for general practitioners and congressional support have made it possible for us to move forward in this area. The present program provides two types of training for the practicing physician—the residency training program under which grant support may be provided which enables the practicing physician to leave his practice and take training which will make him a fullfledged psychiatrist; the other is for postgraduate courses for the practicing physician who intends to continue his practice but who wishes to have a better understanding of the psychological factors in health and illness.

Under the program, support is offered medical schools, hospitals, clinics, and national and local medical and psychiatric societies to develop and conduct

postgraduate courses, institutes, and seminars. The response to this program to date is concrete evidence that this type of training is fulfilling a hitherto unmet need. Four grants (two residency, two postgraduate) have been awarded. Thirteen additional applications (10 residency, 3 postgraduate) have been approved by the National Advisory Mental Health Council and funds will be awarded shortly.

COMMUNITY SERVICES PROGRAM

State activities

It takes many strands to weave a pattern but the pattern in State community mental health programs is emerging perhaps faster than any of us would have dared to dream 10 years ago. In State mental health programs there has been a trend toward more interagency collaboration. One finds increasing participation of community mental health and hospital programs in the training programs of professional schools. Federal, State, and local funds budgeted in 1958 by State mental health authorities increased sharply for training of community mental health people.

The technical assistance projects program has been an exceedingly fruitful avenue for strengthening community mental health programs, coordinating mental health activities in a State, and bringing to people working on State problems expert knowledge on specific subjects. At the invitation of the State mental health authority the Institute helps plan and supports workshops or conferences on a particular subject of concern to the State. Top experts in the field are invited to attend and join with the State personnel in a concentrated study of specific problems. Last year 17 such projects were completed. Subjects ranged from mental retardation to alcoholism as a mental health problem in industry. The impact of these technical assistance projects is not limited to the originating State since reports of the project are published and distributed widely to people in other States.

Regional activities

States are cooperating to attack problems of mental illness and to promote mental health in a number of ways. We have discussed, in other years, the importance of the work of the Southern Regional Education Board, the North East State Governments Conference, and the Western Interstate Commission for Higher Education. This last year as a result of the 11-State survey of mental health needs conducted by Western Interstate Commission on Higher Education, a Western Council for Mental Health Training and Research was established. This organization has a 4-year grant from the Institute. Their goals include the development of programs in the Western States in mental health training and research which cross not only State lines but institutional and professional lines as well. Some very practical approaches include the development of psychiatric residency programs between universities and State hospitals on an interstate basis, specific research and training programs which would include summer placement programs for high school students, and summer training programs for graduate students.

The year 1958 witnessed the growth of cooperation through interstate compacts. Two States, Kentucky and Louisiana, passed legislation ratifying the interstate compact on mental health. This brings the total to 12 States now participating in this interstate agreement. Under this program State residency requirements may be waived if to do so is for the best interests of the sick person.

Developing mental health services in rural areas continues to be a major problem. Most mental health services are concentrated in cities, especially in metropolitan areas which have professional training centers. The most recent data available indicate that only 9 percent of professional man-hours of all outpatient psychiatric clinics were in rural areas which contained 41 percent of the population of the Nation. Several States are experimenting with regional or multicounty administrative units for providing mental health services.

In 1939, only 43 general hospitals in the United States accepted psychiatric patients: in 1959, almost 1,000 general hospitals accepted these patients. The availability of coverage for mental illness in Blue Cross and other health insurance plans has been an important factor in this development in many States. Despite this encouraging progress, however, the majority of general hospitals still do not provide care for psychiatric patients.

Alcoholism

Last year, as a result of the stimulus of this committee's action and the appropriation of funds for work in the field of alcoholism, the Institute took steps to expand and strengthen its work with the States. To accelerate joint efforts of key people on this problem in different parts of the country, two national-level conferences were held. In January, staff members of the National Institute of Mental Health and Public Health Service Bureau of State Services met with the executive committee of the North American Association of Alcoholism Programs. In April, in conjunction with the Bureau of State Services, an ad hoc planning committee met with representatives of a variety of official and voluntary agencies with an active interest in alcoholism. Present knowledge and programs in the field were reviewed in conjunction with future planning.

The Institute has increased its consultative and technical assistance services to States and communities with respect to alcoholism programs. Consultation was provided on such problems as developing more effective treatment and rehabilitation measures in hospitals and clinics, alcoholism in industry, alcoholism among the Indians, and alcoholism in relation to such chronic diseases as tuberculosis.

CARE OF MENTALLY ILL

We are in a period of changing concepts with regard to treatment of the mentally ill. Traditional ideas of treatment are being challenged. There is a growing recognition of the concept that long periods of hospitalization are not necessarily the best treatment for every person who is mentally ill. More and more in Europe and in this country the role of the mental hospital is being studied in relation to other community facilities for the treatment and rehabilitation of the mentally ill.

Mapperly Hospital, Nottingham, England has developed in that community a mental health service which provides for use of the resources of the home, domiciliary services, and community activities in the treatment and rehabilitation of the mentally ill. Outpatient services with short-term admission to hospitals, as required for treatment or rehabilitation are part of this program. With the development of hospital-community cooperation, Mapperly is also an open hospital—there are no locked wards.

This program, as well as many others, raised interesting questions about hospital management and the best ways to reduce disability from mental illness, which are reflected in a variety of new approaches being explored in this country. Establishment of day and night hospitals, "open" hospitals, emergency care and outpatient treatment services, as well as followup and aftercare programs are in operation in many areas of the United States.

Many of the mental health project grants being supported by the Institute under the provisions of title V of the Health Amendments Act (Public Law 911) are designed to explore improved methods of care, treatment, and rehabilitation of the mentally ill. One State hospital, for example, has established an emergency psychiatric team who visits the patient in his home and provides intensive emergency treatment there. The study will eventually determine the effectiveness of this type of treatment as compared with hospitalization. This is somewhat similar to the program initiated in Amsterdam, Holland, a number of years ago by Dr. Querido. He found it an effective method. Among the 71 mental health project grants presently being supported are experiments and demonstrations which will provide new knowledge on effective methods of care, treatment, and rehabilitation of the mentally ill. In addition, this program stimulates the use of knowledge already available but not widely used.

BIOMETRICS

As more new therapeutics programs (drugs, use of day and night hospitals, halfway houses, and open hospitals) and treatment facilities are introduced into hospital and community programs, the task of obtaining data on people under treatment becomes increasingly difficult to interpret. Yet it is imperative to have data which tells us what is happening to the people we are treating. Eleven States in the model reporting area have completed cohort studies which illustrate these points. These studies determine probabilities of release, death, and retention in the hospital. Groups of first admissions, matched as to age, sex, and diagnosis, were followed for the first 12 months of hospitalization.

These studies demonstrated that there is considerable variation among the mental hospital systems of these States and the probability of retention, re-

lease, and death during the first 12 months following first admission. A large variety of factors were responsible for the differences. These included characteristics of patients admitted, the severity of the illness, the characteristics of the communities from which the patients were drawn and to which they returned, the presence or absence of other facilities for the care and treatment of the mentally ill, hospital policies which affect the admission or release of patients, staffing patterns of treatment programs, and the philosophy of the hospital with respect to the degree of improvement expected in patients prior to their return to the community.

The interaction of factors operating in these hospitals and the communities they serve raises the question of how we are going to use the mental hospital in the future. For example, public mental hospitals in areas where there are large psychiatric units in general hospitals may receive a higher proportion of patients with poorer prognosis than in areas where the mental hospital is the only or primary treatment resource. The facts in these studies not only demonstrate the significance of this type of information but also open new horizons in our concepts of hospital management and the role of the mental hospital of the future. What is the optimal size of a mental hospital? What is the best relation between acute and continued treatment services? How should the mental and emotional problems of special groups, such as alcoholics or the aged, best be managed? Certainly the mental hospital will be different from that of the past. This is as it should be, because as man has learned he has moved ahead.

PROGRESS IN 1959

Dr. FELIX. Mr. Chairman and members of the committee, during 1959 every program of the Institute expanded and in some areas new programs were developed.

In the research grants program there was a substantial increase in the number of studies on problems of schizophrenia, alcoholism, mental retardation, and psychopharmacology.

Support of projects in psychopharmacology has increased from about \$2 million to approximately \$4 million.

A new energizer developed during the past year appears to be a promising specific treatment for mental depression, and studies are being made which may lead to its use in this type of mental illness.

A large number of projects were concerned with various phases of the problems presented by schizophrenia. Twenty-seven studies were devoted to evaluating the use of drug therapy in this disease. Many other projects dealt with basic physiological, psychological, and sociological aspects of schizophrenia.

Mental health project grants (title V, Public Law 911, 84th Cong.) number 71 and show great promise in developing new concepts in the care of the mentally ill, as well as encouraging the utilization of existing knowledge.

DEVELOPMENTS IN FIELD OF SCHIZOPHRENIA

Senator HILL. Insofar as schizophrenia is concerned, it affects a large number, a relatively large number of people; is that not true?

Dr. FELIX. That is correct.

Senator HILL. And up to recently there has not been too much that could be done about it; is that right?

Dr. FELIX. That is true. This is the most serious, generally speaking, the most malignant of the mental illnesses, and on any day sufferers from this disease occupy more beds in mental hospitals than any other category of disease.

Senator HILL. Most of them really have become lost souls, so to speak, have they not?

Dr. FELIX. To a large extent, this is so. We feel there are some developments which may change this picture. Some of the new drugs give promise of moving these patients toward health with the assistance of other types of therapy, which may change this picture one of these days, we hope.

SPECIAL REPORT

If the chairman and the committee would wish, I have a special report on program developments in schizophrenia which I could submit for the record.

Senator HILL. We will be very happy to have it.

(The report referred to follows:)

PROGRAM DEVELOPMENTS RELATING TO SCHIZOPHRENIA, 1959

In appropriating funds for fiscal year 1959, the Congress recommended that \$1,300,000 should be spent in the area of schizophrenia, over and above amounts spent the previous year. Consonant with the gravity and the extent of schizophrenic disorders among the mentally ill, the NIMH has channeled approximately half of its research funds into studies directly or indirectly related to schizophrenia. The total allocation for research grants and intramural programs combined in fiscal year 1959 is \$28,810,000. Thus an estimated \$14,400,000 may be regarded as being applied to activities relevant to schizophrenia.

Such activities include a wide range of studies in basic research, in clinical research, and the testing of promising therapeutic measures, in the collection and interpretation of trends in mental hospital populations, as well as programs for the advanced training of personnel in techniques of therapy and rehabilitation, and projects in the development of hospital, clinic, and community services for the diagnosis, treatment, and rehabilitation of the mentally ill.

Although it is possible to distinguish activities specifically related to schizophrenia fairly clearly in certain types of clinical research, it is less meaningful to attempt to pinpoint the specific effort in schizophrenia within the areas of basic research, training, and community service. In basic research, developments in many fields may be potentially relevant to schizophrenia. Training and community service activities, on the other hand, maintain a broad strategy in preparing personnel to utilize all effective procedures, as they develop, in the treatment of the mentally ill.

The following report indicates the current support and conduct of research under NIMH auspices which pertains fairly directly to schizophrenia, and gives a view of the main directions taken by the program.

THE RESEARCH GRANT PROGRAM

The Institute's fiscal year 1959 estimate for the support of research on schizophrenia, carried out in hospitals, clinics, universities, and other institutions throughout the Nation by NIMH grantees, was \$4,324,000—an amount larger by \$680,000 than the research grant expenditure in schizophrenia for fiscal year 1958.

It is anticipated that, by the close of fiscal year 1959, a total of 200 basic and clinical research projects directly related to schizophrenia, in the amount of \$5,708,000, will be supported in fiscal year 1959 through the grant program.

The size of the Institute's research grant program reflects the steadily growing interest of research investigators in probing the many unsolved questions concerning the etiology and treatment of schizophrenia. No one "cause" of schizophrenia has been identified. Scientists today believe that this condition of profound mental and emotional disorder probably results from the interplay of multiple biological, psychological, and social factors—the specific importance of which may vary from patient to patient. As a consequence, a wide range of research projects in many disciplines, including a variety of collaborative studies, is underway.

In view of the importance of the problem and the urgent demands for research results, the Institute has attempted to follow all possible scientific leads in its

research program in schizophrenia. From time to time, in view of the demands for results, premature reports on research findings may be published—reports which will not be substantiated by later research. While the Institute may not approve of the premature publication of such research findings, it has not wanted to criticize such investigations, as the need for new leads in understanding schizophrenia is so great. The Institute plans to continue to provide a broad base of support in this whole field for a variety of promising investigations.

The following synopses will serve to indicate the major areas in which research projects in this field are being supported by NIMH.

Hospitalization and rehabilitation

A number of research studies underway are focussed on improving hospital care and rehabilitation measures used in the treatment of schizophrenics—an important requirement when over half the hospital beds for the mentally ill are filled by schizophrenic patients. Research projects in this area are examining the use of different types of hospitals, including the newer types of hospitals such as the open or day hospitals, as well as probing into the effects of social interaction in the ward on the schizophrenic patient.

Evidence is accumulating which indicates that aftercare and rehabilitation procedures have pronounced effects on the released patient's ability to continue to deal more effectively with his environment. Some current data suggest that with appropriate community services, including treatment with tranquilizing drugs where necessary, hospitalization for many persons afflicted with schizophrenic disorders may be avoided or markedly shortened. Such a possibility has more than economic significance; nonhospital techniques, applied to appropriately selected cases, may be the most effective means of minimizing the disruptive effects of illness and restoring the patient to a productive life.

A series of studies, supported by funds made available under the mental health project grant program, are concerned with the more strategic use of professional personnel and community resources as well as the development of closer relations between treatment facilities and other community agencies. Such activities in areas such as diagnosis, referral, consultation, and rehabilitation have a direct bearing on problems of schizophrenia, since this is the largest diagnostic group among the mentally ill.

Psychopharmacology

The National Institute of Mental Health has, of course, given very special attention and extensive support to research on the use of drugs in the treatment of mental illness. There seems to be little doubt, today, that a number of the new psychopharmacologic drugs do relieve the symptoms of the agitated, hyperactive, schizophrenic patient. Chlorpromazine and reserpine, on which most of the research has been done, have proven to be particularly effective and a number of newer drugs have appeared which give promise of being even more effective. Not only have the drugs made the life of the hospitalized schizophrenic easier, but their use has resulted in a more hopeful attitude on the part of hospital personnel toward the chronic schizophrenic patient, thus improving the whole treatment situation. Much research needs to be done, however, before the efficacy, performance, and mode of operation of psychopharmacologic agents is understood.

Sixty-eight basic and clinical research projects in the field of psychopharmacology which are directly related to schizophrenia, and which total \$2,005,052, will be supported by NIMH during fiscal year 1959. A number of these research projects are examining new drugs which have shown clinical promise, attempting to analyze some of the behavioral and physiological processes involved. Other research investigators are engaged in animal screening studies, exploring in detail the effects of the ataratic (tranquilizing) agents on animal subjects. Research is also underway on the psychotomimetic, or hallucinogenic, agents—compounds which have been found to produce many of the symptoms accompanying schizophrenia—auditory and visual hallucinations, fear which approaches panic-like proportions, strong feelings of depersonalization and a loss of insight into the experimental or temporary nature of the drug state. Other related substances, which block the psychotomimetic effects of the earlier compounds in this series, have now been synthesized. These new “antipsychotomimetic” compounds are being explored further for their usefulness in treating schizophrenia.

New directions for research on the use of psychopharmacologic agents with schizophrenics will include the synthesis of drugs for use with patients who do

not now respond to drug therapy, the development of drugs which will be more beneficial and have fewer toxic effects, studies aimed at understanding how drug therapy and psychotherapy can be most effectively combined for schizophrenic patients, and the development of drugs for use with apathetic, withdrawn patients.

Psychotherapy

While many schizophrenic patients did not respond successfully in the past to the use of psychotherapeutic treatment, therapists over the years, and particularly in the United States, have continued to explore the effectiveness of psychotherapy with both acute and chronic patients. Recent research suggests that intensive psychotherapy may not only prove very helpful to schizophrenic patients but may also throw light on the etiology of the schizophrenic process. Many of the studies in psychotherapy, supported through the NIMH research grant program, are related to schizophrenia—research analyzing the therapeutic intervention process, research examining the role of the individual therapist's personality in treatment, studies on the long-term effects of therapy, and many other avenues of research in this field.

Surgical and convulsive therapies

A number of somatic or physical treatment methods are still used with schizophrenic patients, including electroconvulsive shock, insulin shock therapy, and psychosurgery (and of course pharmacotherapy) with varying responses in improvement.

The use of shock therapy in schizophrenia, recognizably only an empiric treatment, has resulted in what has been described as quantitative rather than qualitative effects, characterized by partial improvement, relatively little change in the patient's prepsychotic personality pattern, and frequent relapses. While the use of psychopharmacologic agents, combined with psychotherapy when possible, has replaced the shock treatments in a number of hospitals, research studies are still examining the impact and effectiveness of these alternative treatment methods. NIMH investigators this year confirmed the belief behavior change in electroshock depends upon an actual alteration in brain function, as evidenced by serial changes recorded by that delicate tabulator of brain activity, the electroencephalogram.

Psychosurgery, once hailed as another "one-shot" cure for severe schizophrenia, has been used less and less in this country as its dangers became increasingly apparent. NIMH research grantees this year studied a group of brain-operated schizophrenic patients after an 8-year followup period, and found permanent losses in certain intellectual functions which were related to the site of surgery and the age of the patient at the time of the operation. This research highlights not only the permanent losses which may be related to certain psychosurgical methods, but the importance of an adequate time interval in studying the effects of psychosurgery.

The biology and biochemistry of schizophrenia

A very heavy share of the research grant program has been invested in projects exploring the biology and biochemistry of mental illness. Research in this broad area, including studies in psychophysiology, endocrinology, neuroanatomy, genetics, biochemistry, pharmacology, and electroencephalography, is currently passing through a resurgence of activity as well as undergoing a gradual lessening of its earlier, almost complete isolation from the main stream of modern dynamic psychiatry.

As the converging impact of new knowledge from all these fields, utilizing the new and powerful tools of biological investigation, is brought to bear on the biological factors in schizophrenia, new clues to the etiology and development of this condition may be expected to emerge.

The problem of etiology in schizophrenia is recognizably not a simple one. The human being—an intricate biological and psychological unit, interacting in societies with other human beings, is, as one distinguished research investigator described it, the most complex of systems imaginable. In the past, the most productive biological scientists have made most progress by working with simple systems—single animal cells, bacteria, viruses, and then with part-processes in higher organisms. The testing of hypotheses in biological investigation, when they extend to higher animal systems, requires rigorous methodology and runs the risk of an oversimplified analogy with simpler biological processes. It is these kinds of difficulties that research investigators working in the biology and biochemistry of mental illness are confronted with today.

The increased precision of experiments in some areas of biochemical and biological research carried on under the NIMH research grant program has resulted in a partial disconfirmation of a number of earlier hypotheses concerning biochemical correlates of schizophrenia. Despite this, important contributions dealing with basic physiologic mechanisms related to behavior, with chemical and electrical correlates of brain functioning, and with research on the motivational effects of stimulation of the brain, continue to emerge from grant-supported research, as well as from the Institute's internal programs in basic research. It is important that support for research on the underlying physiology of mental illness continue.

Family processes, psychodynamics, child development

Another significant research avenue to the understanding of mental illness in general, and schizophrenia in particular, leads into an examination of the role of the family and of child-rearing practices as they affect the development of schizophrenia. A substantial number of grant-supported research projects in this area are under support, and psychological-sociological understandings, particularly with respect to family interactions, are contributing steadily to our knowledge of schizophrenic reactions.

Several long-range, grant-supported studies on the intrafamilial environment of the schizophrenic patient have helped to clarify such factors as the transmission of irrationality and distortions of reasoning which may occur in the family of a schizophrenic patient, and the abnormal interaction and organization which often exist.

Some common features shared by those families which have been studied include an atmosphere of emotional struggle and a pronounced tendency to surround the growing child with more or less unreal conceptions of, and approaches to, life. It is still not clear whether this background may be assumed to be a directly attributable cause of mental illness.

One of the research projects is concerned with the development and evaluation of methods for family therapy of schizophrenic persons, after their discharge from the mental hospital, and in the home setting of the patient. Active work with the family begins before the patient's hospitalization period is ended, and the latter is made as brief as possible.

Research is continuing into the many genetic and environmental factors which appear to be involved in predisposing individuals to, as well as precipitating them into, psychopathologic states.

Epidemiological and sociocultural studies

The Institute has also recognized in the research-grant program the importance of supporting epidemiological studies—essential to an analysis of incidence and prevalence rates in mental illness. Epidemiological research is also necessary for the evaluation of the effect of widespread changes in care and treatment methods (such as the introduction of tranquilizers).

Communication and perception

Grant-supported research studies in the processes of human communication and perception are helping to furnish a greater understanding of the nature and function of disordered thought, fantasy, and speech patterns, as well as the development of delusions and hallucinations.

Psychometric studies

Several studies under grant support are utilizing psychological testing situations to describe the components of schizophrenic behavior. One unique project has been exploring the responses of severely disturbed and deteriorated hospitalized schizophrenic patients to a carefully screened set of simple rewards, progressing from this to an examination of more complex motivational responses. The methods used in this study permit exhaustive sampling of the behavior of individual patients over a period of years, under relatively stable circumstances, and under a wide variety of particular conditions. Such research can help to develop sensitive measures of the effects on the patient of such variables as drugs, psychotherapy, ward changes, and parole. This research has already indicated that participation in the experiment has helped some schizophrenic patients, hitherto regarded as hopeless, to regain some social functioning. It also emphasizes that there are extensive and complex individual differences found in the diagnostic category "schizophrenia"—differences which have been suspected for some time but not studied in detail.

THE INTRAMURAL RESEARCH PROGRAM

The intramural allocation in fiscal year 1959 for research pertaining to schizophrenia was \$3,500,000, representing an increase of \$235,000 over the previous fiscal year. The use of these funds will be described under the programs of the respective Institute branches engaged in such work.

Clinical investigations

The Clinical Center of the National Institutes of Health provides a setting for clinical research studies in schizophrenia which would be difficult to duplicate at any other research center in the country. Great care has gone into the criteria used in selecting patients in order to maximize relevant psychiatric genetic, social, and medical aspects of the schizophrenic cases studied in the program. This group of patients is continuously available for comparison with a control group of normal persons, who are maintained under rigorously matched conditions of diet, activity, and management.

The Laboratory of Clinical Science has made important contributions to critical scientific design in research on schizophrenia. Indeed, this laboratory has become a model for research in this field, due to its careful program designs which guard against the sources of error which have become common to biological studies in schizophrenia. Information in such areas as biochemistry and intermediary metabolism is accumulating, making use of techniques such as chromatography, spectrophotometry, and isotopic methods.

Results so far have been critical of a number of prevailing hypotheses concerning endocrine, circulatory, metabolic, and other biochemical and neurological processes which have failed to be verified under these more rigorous research conditions. There appears to be no such pathological change which can at present be accepted as characteristic of schizophrenia. However, maximal use will continue to be made of these "standing populations" for the thorough evaluation of all leads which our present state of theory and technique can suggest.

A number of studies currently in progress or completed are concerned with the metabolism of amino acids and amines in schizophrenic patients and normal persons, and the study of normal and abnormal pathways in the metabolic fate of epinephrine, tryptophane and serotonin which may distinguish these groups.

Significant results are being obtained through studies of the intermediary metabolism of epinephrine in man. Recognition of epinephrine's important role in mammalian physiology dates back at least half a century, but the metabolic fate of this compound has been poorly understood heretofore. The new studies provide a clearer picture of metabolic processes affecting the nervous system and responses to stress, and may bear on the possibility of a biochemical basis for schizophrenia or other psychoses. A wide variety of hypotheses can thus be accurately tested.

A series of unusual investigations of the family setting of schizophrenia has also been conducted, with entire families of severe schizophrenic patients living together on the ward for lengths of time extending up to 2½ years, and averaging 1½ years. Detailed observations were made by a staff in operation on a 24-hour basis. A number of trends emerge from these data, which are still being analyzed. The mother-child relationship is becoming better understood in relation to larger family problems. The results of these studies disclose the interdependence of strong and weak family members, violent cycles of closeness and distance between them, and the distortions of communications which occur in these families.

Family situations are also being examined in descriptive studies of the structure of home life, with special emphasis on the role of communicative and thought disorders in evading anxiety. Future work will include detailed comparisons with a series of nonschizophrenic families, to determine the extent to which the processes identified are related to schizophrenia as such.

One series of studies is concerned with degrees of response of schizophrenic patients under conditions of both simple and complex performance, their sensitivity to drugs and other independent variables, and correlations with autonomic, EEG, and other neurophysiological measures. A set of methodological studies is investigating the construction of scales for characterizing parent-child relations in families with schizophrenia. The reliability of ratings by psychiatrists and ward personnel is also under study, with special reference to schizophrenic behavior. Other work involving schizophrenic patients focuses upon the approv-

ing or disapproving attitude of therapists in governing the flow of topics in psychotherapeutic communication, the patient's evaluation of psychotherapy, and the dropout rate in such therapy. Some research directed toward examining the socioeconomic correlations of schizophrenic incidence in various populations is also in progress.

The past year has also seen the development of a cooperative program in clinical neuropharmacology between NIMH and St. Elizabeths Hospital. One of the earliest objectives of this program was to design and calibrate a number of research instruments for the detailed characterization of the individual chronic schizophrenic patient and the changes he undergoes in treatment, more particularly in relation to the pharmacotherapies. The lack of adequate methodological tools is particularly poignant in a mental hospital setting because of the serious shortage of personnel and of time available to make serial observations. Some 30 existing research instruments have been reviewed in terms of their content and formal attributes. The testing of their applicability has been proceeding steadily. A relatively simple scale to measure patients' emotional reactions and changes has been designed and is now undergoing further testing. If successful, this scale should permit relatively simple and economical observation of patients within a ward setting, as well as speed the handling of data by modern data-processing methods. This should be of considerable value in the long-term assessment of the impact of drug therapies in the chronic schizophrenic patients. These and related studies are being carried out in conjunction with the Institute's Biometrics Branch and its Laboratory of Socio-Environment Studies.

Studies are also being planned at the Clinical Neuropharmacology Research Center on the effects of the interaction between the drug therapies and carefully designed group therapeutic programs and other rehabilitative measures. Here again the lack of adequate methodology for the study of the effectiveness of these procedures presents a difficult hurdle.

Research studies at the St. Elizabeths center are also in progress on the interaction between drugs used in the treatment of chronic schizophrenic syndromes and their effect on hormone levels. These are being related to animal behavioral studies with special reference to the effects of drugs and hormones applied locally to selected areas of the brain. There is preliminary (at this stage hardly more than suggestive) evidence that some areas of the brain may be more permeable than others to certain naturally occurring neurohormones. This aspect is being pursued by the Clinical Neuropharmacology Research Center in cooperation with the Laboratory of Clinical Science, using radioactive tracer techniques. Another possibly related problem is a study being carried out in the intermediate metabolism of the recently identified psychotomimetic compound, N-N-dimethyltryptamine. This has led to the isolation of a metabolic route for this compound which has not been previously described. The effect of chronic administration of this substance will be tested in the experimental animal with special reference to behavioral deficits produced by the drug.

Basic research

Many studies in basic research are highly important to the developing attack upon schizophrenia. Such studies include research on the mechanisms of neural organization and function in the central nervous system, and its response to drugs, electrical stimulation, sensory deprivation, and other variables; work on the mechanism of genetic transmission and its derangement; analytic studies of behavior processes in lower organisms; neurophysiological mechanisms of conditioning; studies of the complexities of successful (normal) socialization and family life, and how destructive tendencies are contained therein; and analyses of existing sociocultural institutions in their impact on human development and change.

An example of basic research having long-run implications for schizophrenia is the direct exploration, through implanted electrodes, of brain areas whose stimulation duplicates the rewards and punishments usually found in the environment. An implantation technique has been developed at NIMH which permits simultaneous exploration of 156 separate points in the living animal brain.

Other studies with volunteer human subjects are exploring the effects of sustained and total deprivation of all sensory stimulation from the environment. Under these circumstances, normal persons may develop unrealistic anxieties, perceptual-motor disturbances, and even hallucinations—all characteristics of the behavior of chronically ill patients. This suggestive lead forms the basis of a wide variety of further studies now programed.

TRAINING

It is anticipated that \$475,000 will be spent during fiscal year 1959 for training professional personnel in skills relevant to schizophrenia. Support of such training is maintained as an integral part of the training grant program in psychiatry, psychology, social work, and nursing. In addition, more than half of the \$1,145,000 budgeted for NIMH fellowships in fiscal year 1959 will support the training of scientists in research skills relevant to the understanding and treatment of schizophrenia.

The Biometrics Branch

As part of its total program, the Biometrics Branch is engaged in measurements of the prevalence and incidence of mental disorders in various groups, and relating this information to pertinent factors of demography, sociocultural environment, and therapeutic programs. Implementation of such a program entails consultative and direct services to State and local departments of mental health, and a long-range effort to improve and coordinate the flow of statistical data from various sources in the Nation.

The introduction of promising new services (drugs, day, night, and open hospitals, halfway houses, and community services) is leading to increased complexities in the interpretation of statistical data, underscoring the need for new statistical reporting systems of adequate scope and flexibility. A model reporting area, in which mental health statistics are processed each month, now includes 17 States. Cohort studies of the fate of schizophrenic admissions (among others) have shown wide inter-State variations in release, retention, and death rates, as a function of hospital policies.

Before causes can be assigned to the prevailing decrease in the number of resident patients, breakdowns of data are necessary which have not been available.

In remedying such deficits, the expansion of the program will eventually include the establishment of several community field stations, to serve as multidisciplinary centers for epidemiological and biostatistical research. Plans are also being developed for the collection of information of socioeconomic characteristics of patients admitted to clinics for a specified period in 1960, to be related to the population census of that year.

Such data are not only of importance in sensing the distribution and flow of types of mental disorder under various conditions, but it is most likely that comparative data will further the refinement and standardization of clinical diagnostic categories now in use.

COMMUNITY SERVICES

The responsibilities of the Institute's Community Services Branch include efforts to improve, extend, and strengthen State and local programs for the care, treatment, and rehabilitation of the mentally ill. Professional and technical assistance to State and local programs is provided through staff of the National Institute of Mental Health in headquarters and in eight regional offices. Special staff are available for hospital consultation and surveys. The consultation which is provided covers the full range of services for the mentally ill, including services in clinics and general hospitals, mental hospitals, alternatives to hospitalization, and aftercare and rehabilitation in the community.

The growing trend to experiment with the new methods of care and treatment, and to decentralize and develop new services for the mentally ill in the local community make it especially important that consultation is available at this time to disseminate the most recent knowledge from research, pilot projects, and program experience. While consultation is not usually focused only on schizophrenic patients, as has been indicated previously, schizophrenic patients represent a large proportion of the mentally ill in hospitals and in communities.

Besides administering the mental health project grant program, which is focused on the mentally ill, the Community Services Branch is also responsible for the Federal program of grants to States for community mental health services (\$4 million). This program focuses on the prevention of mental illness and the promotion of mental health. Federal grant-in-aid funds are being used also for the community care of the mentally ill, especially in the development of local aftercare and rehabilitation services.

OVERVIEW

The program just described represents research, training, and service activities supported by funds specially allocated to schizophrenia. Such an extremely broad program is strategically sound since the complexity of the problem makes it likely that relevant variables will in fact be found in all major areas of investigation.

In the broad biological sphere, research methods and study populations have been developed which are designed to avoid the pitfalls encountered in previous studies, so that leads provided by basic research can be rigorously tested.

Analysis of population and mental hospital data is approaching the point where reliable trends can be reported, and the effect of treatment programs evaluated.

The role of the drug therapies while still a matter for critical evaluation, has taken new and important research directions which may be expected to widen the potential treatment use of psychopharmacologic agents.

The work on the relation of the family to schizophrenia will undoubtedly be extended and clarified.

Studies of the behavior processes in psychotherapy and in experimental attempts to restore deficits in behavior may soon give a clearer description of the details of schizophrenic behavior.

Probably the time is not yet ripe for any new major statement in the area of schizophrenia. But the program of research, on an extended front and at an expanded pace, shows signs of leading to the definition of areas wherein strategic concentration may be highly productive in the related problems of causes, treatments, and finally, prevention.

TRAINING PROGRAM

Dr. FELIX. Shortages of personnel in the mental health disciplines continue. Grant support for training of clinical personnel continues and programs providing grant support for research training are underway.

In the research fellowships program, which was markedly expanded, a substantial share of the increased funds have been awarded for work in the field of physiology.

Twenty-three new grants were awarded for research training on a graduate level in psychology. A new program providing psychiatric training for general practitioners provides for residency training in psychiatry and postgraduate courses for the practicing physician who intends to continue his general practice.

This committee recalls it was very interested in such training and this was included in our appropriation last year.

Senator HILL. We thought that was most important. Do you feel that the program is going along very well?

Dr. FELIX. Yes, sir; it is going along very well. I was delighted when this opportunity was given to us by the Congress last year, but I must admit that, delighted as I was, I had no idea how rapidly it would catch on. This is being enthusiastically seized upon by medical societies, by medical schools, and by physicians in practice, and at the present time the funds which were appropriated for this purpose either have been expended or are in the process of being paid.

This has been an extremely successful program.

Senator HILL. In other words, the results have been very gratifying to you?

Dr. FELIX. Yes, sir; they have been very gratifying.

Dr. Shannon has just pointed out to me that I might mention, in relation to training, the role of the Institute in the development of service personnel in this field. We have been quite active in stimulating interest in this field among the people, not only in the field of medicine, but in the other fields which contribute so much to this.

Our own program at the National Institutes of Health has made it possible for some of our own people to have additional training, which has made them sufficiently expert that they have taken positions in the forefront of this field. I think this has contributed greatly to what we have been able to do.

CLINICAL NEUROPHARMACOLOGY RESEARCH CENTER

The opening of the Institute's Clinical Neuropharmacology Research Center in cooperation with St. Elizabeths Hospital highlights expansion of the Institute's own research program. Broad clinical studies of the action and mode of action of tranquilizing drugs in a mental hospital setting and studies in the basic sciences are expected to provide scientific data and insight into problems of mental illness not now available.

Among the important advances made during the year in the Institute's laboratories at Bethesda was the discovery of how the body disposes of adrenalin and noradrenalin, hormones which are related to a wide variety of emotional responses and which hold part of the key to the enigma of how biochemistry regulates human behavior.

This was a real breakthrough and was a discovery which has implications beyond mental illnesses, and for many other illnesses as well.

Senator HILL. Could you give it to us in a little more laymanlike language, so to speak?

USE OF ADRENALIN BY BODY

Dr. FELIX. I will try, Senator. You are familiar with the substance adrenalin, which is used clinically to relieve certain kinds of involuntary muscle spasms such as in asthma and conditions of that kind, also to relieve certain types of allergic responses to substances such as pollens and horse serum and so forth. This is a substance produced in the body primarily by the adrenal glands which are the little glands that sit one on top of each kidney and are named from this fact.

A close twin substance, noradrenalin, is produced at the nerve endings of various nerves and it is now known that there is more enzyme per unit of weight for production of noradrenalin in certain areas in the brain than anywhere else in the body. The breakthrough applies equally well for noradrenalin as for adrenalin.

Adrenalin, now, is a substance which prepares the normal individual for what we call "fight or flight." I recall very well one time when I was a boy—and I suppose I should not tell this because I might find that I will have my security clearance taken away—but I was a boy of only 10 or 11, and we found that watermelons tasted better if you got them fresh picked in the moonlight; but we also found, quite unreasonably, I suppose, that some of the farmers who grew them resented this.

Senator HILL. That was a natural reaction, wouldn't you say?

Dr. FELIX. I would say it was a natural reaction in both parties, Senator.

We hied ourselves one night into a field and found some watermelons. Unfortunately, the farmer was alerted and as he saw us coming he jumped up and shouted to us and fired a shotgun in the air. As far as I was concerned, he could have just as well hit me for what happened.

There is an expression down South, you may have heard, "I took off like a scalded dog." There was a fence there, I do not know, 3 or 4 feet high, at least, and I cleared that fence. I must have jumped it. I do not know how else I got through it.

Under normal conditions, this would not have been possible at all. I am joking here, but I have a very serious point. What happened undoubtedly was that under the instant fright my body poured out tremendous amounts of adrenalin which made it possible for me to be able to do things that under normal conditions I could not do.

Another thing which this substance does is to affect an area in the base of the brain which we call the brain stem, the part just at the bottom of the brain that goes down and joins the spinal cord.

This area, which is an activating or arousal system, is the part of the brain which makes it possible for an individual to wake up, to be alert, on the *qui vive*, if you will.

HOW ADRENALIN IS DEGRADED

We have known considerable about what adrenalin does and how it is produced, but did not know how it was destroyed or degraded and made ineffective. Now we know as a result of research by NIMH scientists, that there is a metabolic cycle which changes adrenalin and noradrenalin to another substance called metanephrin, which is physiologically inert.

The importance of this is this: We knew what adrenalin does, we knew how it is produced, but we could not understand how it was destroyed. If adrenalin remains in its active form in the body, these situations of "fight or flight or fright" persist indefinitely or until the level of adrenalin is reduced somehow.

Knowing the way adrenalin is degraded as well as the way it is manufactured, we can go about studying many psychological and psychiatric conditions with regard to the possibly faulty breakdown of adrenalin. Take, for example, catatonic schizophrenia—a condition in which the person is really in a frozen alertness; so much so that he cannot move and can be molded into various positions.

This may possibly involve an overproduction of adrenalin or—and this is just as likely, because at this point we do not know, it may be due to a lack of proper breakdown of the substance, so there is an inappropriate action from its piling up in the body.

The factory may be turning it out in normal quantities, but the evacuation system may not be getting rid of it.

We know that nervous tension states referred to as anxiety states are an important and common part of many mental diseases and nervous upsets. We also know that adrenalin is an important factor in the distressing symptoms associated with this nervous tension or anxiety. Now it will be possible for the first time to determine whether this effect is due to overproduction or inadequate inactivation of adrenalin. Now it is possible for the first time to make an almost complete accounting—of more than 90 percent—of all the adrenalin and noradrenalin produced by the body.

VALUE OF NEW KNOWLEDGE ABOUT ADRENALIN

Now, knowing this, we can approach a number of disorders from both points of view—from the point of view of the physiological

phenomena which would cause excessive manufacture or delay its destruction.

We now have two strings to our bow, if you will, in studying such common conditions as anxiety as well as others.

Does that, in some measure, explain it to you?

Senator HILL. I think so.

Senator Byrd, do you have any questions?

Senator BYRD. I think it was very interesting, Mr. Chairman.

Senator HILL. Yes, indeed.

Dr. FELIX. I hope I will not be held accountable for my 10-year-old prank.

COMMUNITY MENTAL HEALTH ACTIVITIES

Community mental health activities have continued to expand. The trend has been toward greater interagency cooperation. Technical and consultative services of the National Institute of Mental Health have been increasingly in demand.

TECHNICAL ASSISTANCE PROJECTS

Illustrative of one type of such assistance is the completion of 17 technical assistance projects on such subjects as alcoholism as a mental health problem in business and industry, inpatient psychiatric units for children, treatment of adolescents, and the role of the community center in promoting mental health.

These projects serve to strengthen community mental health programs by bringing to people working on State problems expert knowledge on specific subjects.

What we do here, Senator, is this: A State, or sometimes several States going together ask for assistance in putting on a study course or an exploratory session of several days in which the people concerned with the particular project, or particular area which is causing them difficulty, can participate and can attend.

They meet experts who might come from anywhere in the United States to give them the facts as they are known. These funds allow them to bring these experts together and bring their people together, if their own funds do not permit it, to discuss these problems.

Now we have one request of them and that is that they record their proceedings, and we allow funds in these grants for them to publish this, usually in mimeographed form with a little paperback on it which we can distribute and make available to all the other States or other interested people.

In this way we really multiply this money considerably more than we otherwise would.

ALCOHOLISM

In the field of alcoholism, current projects range from the study of basic metabolic factors in alcoholism to attempts to improve treatment methods for alcoholics in outpatient clinics.

At the Institute's Addiction Research Center, in addition to studies of alcohol addiction per se, work is being done on personality tests, patients' habits, and attitudes of alcoholics as compared to drug addicts.

Technical and consultative assistance provided to the States in the field of alcoholism has been accelerated. Two national level con-

ferences were held during the year to review present knowledge and programs in the field in conjunction with future planning.

BIOMETRICS

The Institute has continued to work closely with the States in collecting, analyzing, and interpreting statistical data on mental hospital populations and outpatient psychiatric clinics.

Recent studies by NIMH biometricians revealed striking differences between State mental hospital systems in the likelihood of patients being released from or remaining in the hospital.

Senator HILL. Might not they be rehabilitated better and restored to more normal life if they were in smaller hospitals and not all in one large institution?

Dr. FELIX. That is true, Mr. Chairman, plus the fact that if the community will take advantage of the opportunities—and they are doing this more and more—to provide adequate supporting and followup services for these patients once they are ready to come out of the hospital, many of them will be rehabilitated more effectively, more promptly, and more permanently.

The trouble is—from my own experience when I was in a State mental hospital system—we would have patients who were otherwise ready to go, but we could not discharge them because there was no hope whatsoever that they would stay out of a hospital. They would come back rather promptly.

INTERNATIONAL CONSULTATION

Liaison and consultation with mental health specialists in other countries during the past year resulted in interchange of information about new developments in psychiatric research and in treatment techniques both here and abroad.

Many rapid advances are being contributed by scientists and mental health specialists throughout the world, and medical researchers are beginning to synthesize all of these new findings into an integrated international attack on the problems of mental illness.

To conclude the summary of my statement, I would like to indicate that the request before the committee for 1960 is \$52,384,000 which, including the comparative transfer, is the same as the 1959 appropriation but \$2,411,000 greater than the 1959 obligation plan.

EFFECT OF HOUSE ACTION

The House Committee on Appropriations, in acting on the appropriations for the Department of Health, Education, and Welfare for 1960, increased the President's budget by \$8,025,000 for mental health activities. At the request of the Senate Appropriations Committee, a statement has been prepared in explanation of how this increase, if enacted, would be applied. This explanation is given in detail in the opening statement which I have submitted for the record.

I have here a summary, which is as follows:

For research projects, there was an increase of \$3,373,000; for research fellowships, an increase of \$110,000; for training, an increase of \$2,993,000; for State control program—that is the formula grants

to the States in which all States participate—an increase of \$1 million; and for our own intramural research, an increase of \$231,000 and 12 positions for expansion of clinical neuropharmacological and biometric studies; and for the review and approval of grants, there was an increase of \$149,000 and 12 positions for additional staff to serve the expanded grant activities; and for professional and technical assistance there was an addition of \$169,000 and 8 positions.

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

Senator HILL. Would you give us your professional judgments as to whether or not these funds can be effectively used, Doctor?

Dr. FELIX. As a professional person who has been active in this field for many years now, I must say, in all candor, that these funds can be used if there is no consideration given to the fiscal needs of the country elsewhere or to other situations which are beyond my competence or capacity; and in speaking thusly, I am speaking strictly as a psychiatrist concerned with one small, little unit of a great big Government. If I were all alone I could use this, yes.

Senator HILL. Effectively?

Dr. FELIX. Effectively; yes, sir.

THE NIMH-ST. ELIZABETHS PROJECT

Senator HILL. Doctor, how is your project at St. Elizabeths coming along?

Dr. FELIX. It is coming along very well, sir, in most respects. We have been able to recruit for that program, as you know, Dr. Joel Elkes, who is one of the outstanding scientists in this activity in England, who has brought with him and recruited here a staff of very competent people.

One of our problems at the present time is that we have more requests from outstanding people to join our staff than we can possibly accommodate.

There is a problem which cannot be solved within the National Institutes of Health, and what I say here is with the full knowledge and concurrence of the Superintendent of the hospital, Dr. Overholser. The fact of the matter is that the hospital is having extreme difficulty providing their portion of the services which are necessary if we are to carry on this project.

As you may remember, when this was set up it was agreed on both sides that the hospital would provide the usual care which is given to all patients there and the National Institute of Mental Health would be responsible for providing the additional funds for scientific personnel, instruments, and things of this nature.

PERSONNEL SHORTAGE OF HOSPITAL

St. Elizabeths Hospital is so short personnelwise that we cannot maintain, or the Superintendent cannot help us by maintaining a stable cadre of technical people such as nurses, psychiatrists, and so forth.

If there is a shortage somewhere else in the hospital he has to take some nurse away and put her over there because basic services have to be covered.

This has been extremely damaging to the morale of the people. This has been a matter of great concern. We hope that something can be done about it.

If something is not done, we are eventually going to have to look elsewhere for a host institution which can accommodate us. This will be really tragic because we have put considerable capital investment in there in remodeling and in putting in permanent equipment, and it is an ideal place to work because of the types of patients and because of its proximity to the National Institutes of Health, to the Library of Congress, and the National Medical Library, and to other facilities which make this extremely desirable.

Dr. SHANNON. May I comment on that? The Department is very well aware of these deficiencies. We have discussed them at great length. We have hopes and expectations that through a group of consultants, which is presently being contemplated by the Department, the situation can be looked into very thoroughly, and hopefully remedied.

We happen to feel that the St. Elizabeths Hospital should be a purely national institution of a high degree of excellence and not simply a place where people from the District of Columbia seek mental aid.

Meanwhile, NIH is willing to use stopgap methods to maintain Dr. Elkes at as high a degree of efficiency as possible by expending more funds than we anticipated and by attempting to make up certain of the shortages; what Dr. Felix relates to is the general environment of the hospital. One cannot have a research program of high excellence superimposed upon a grossly inadequate medical environment.

So we feel, although we can use stopgap methods to satisfy the immediate needs of Dr. Elkes, if this unit is to really flourish, provision for the hospital has to be made on a more significant and generous scale and perhaps a change has to take place in the conception of what the primary function of this hospital is.

Dr. FELIX. I will second that, Mr. Chairman, every word of it, with all the energy I know how to put forth.

REMEDIAL ACTION NEEDED

Senator HILL. It just happens that this committee handles the appropriations for the St. Elizabeths Hospital; so be a little more specific.

Where does this remedy lie?

Mr. KELLY. I wonder if I might comment on that, Mr. Chairman?

Senator HILL. All right, Mr. Kelly.

Mr. KELLY. You may recall that a little over a year ago, following the study made by the St. Elizabeths Hospital staff of what their requirements were to do an effective job, they employed a group of outstanding consultants in this field to review their study; and the conclusions of this study indicated that it would take about a 50-percent increase in the total staff of St. Elizabeths Hospital to bring it up to the kind of standard that could fully perform what was now possible in the operation of a mental hospital.

Of course, this could not be done in 1 year. It would have to be done over a period of time; so you could actually organize and ab-

sorb. We have, in our budget, perhaps for the last 2 years, endeavored to develop a start on this and have made some slight progress this year; and, in the 1960 budget before you there is some further slight progress.

PROBLEM OF DISTRICT OF COLUMBIA PATIENTS

However, there is a very basic problem in arriving at a conclusion on it, which we have under study but do not have a solution to, and that is that the financing of St. Elizabeths Hospital over the years has been on the basis that those patients which are the responsibility of the District of Columbia will be paid for by the District of Columbia.

This means that about 75 percent of the total financing of St. Elizabeths Hospital is a burden on the District of Columbia.

If what you are endeavoring to do is to establish a national resource and an outstanding demonstration center which is more than just a District of Columbia institution, the District of Columbia feels somewhat imposed upon to have the cost go up year after year and yet both of the committees of the Congress and the Budget Bureau, have, on occasion, demanded that there be this proportionate sharing of the financing; and we have worked with the District of Columbia toward this end; and I must say that I think the District of Columbia officials have been extremely cooperative and extremely helpful in trying to go as far as they can, but all of us who read the local newspapers know that they are faced with a very serious financial problem in the District, and they do not feel they can go as far as the financing situation proposes and as we would like to.

Yet we are endeavoring to bring budgets before you which represent an agreed upon budget with the District of Columbia rather than coming up here and asking you to act on a budget which forces the District to do that which they do not feel capable of doing, and we have not yet gotten a solution to it.

We are working with St. Elizabeths Hospital on several possible alternative methods of financing to avoid this problem, and if we do come up with a solution we will certainly bring it to you, Mr. Chairman.

QUESTION OF FINANCING HOSPITAL

Senator HILL. Let me ask you this: This question goes to the problem of the whole financing of the St. Elizabeths Hospital?

Mr. KELLY. It does in this sense, Mr. Chairman: The problem which Dr. Felix points up is that St. Elizabeths Hospital agreed with respect to this William A. White Building, which is being used for the research project, that St. Elizabeths would provide the same kind of care they provided the rest of the institution and then over and above their care would be superimposed the research program.

The problem is that St. Elizabeths Hospital, having responsibility for 7,000 patients, feels they must take their limited resources and share them equally and equitably where the total needs exist and so that in doing this the William A. White Building will suffer proportionately with any other building insofar as patient care is concerned.

Senator HILL. In other words, the staffing of the William A. White

Building would not be any higher than the staffing throughout the whole hospital system?

Mr. KELLY. That is right.

Senator HILL. Doctor, do you have anything to add to that?

Dr. FELIX. I am not sure the Department has had sufficient time to come to a position on this, and I certainly do not want to confound or compound any issues.

I would say, speaking as a person and as one who knows a little bit about the national scene as far as mental health is concerned, that there is a tremendous need in this country for a national resource such as this hospital could be and in fact once was.

It is a little difficult to go to a State and make recommendations with regard to the improvement of the services in their hospitals and have them look at you and smile and say, "That is all very fine, but we are doing better than your own St. Elizabeths, the national hospital, is doing now," and it is a national hospital in that it is supported directly or indirectly—I think I am correct—by national funds.

There is no reply to that remark. This is so. This would give an opportunity for scientists in this country to come and study many operational problems in the care of patients and the different ways of administering the wards and the services, and in providing top-level training for administrators and for clinicians and for scientists who will be working in this area.

We could work out a most productive liaison with the National Institutes of Health, at least the National Institute of Mental Health, and I think the others, too, if this could be done.

So, as I say, and I am speaking in my professional capacity and as the president-elect of the American Psychiatric Association. I would certainly like to see a facility of this kind established as a national resource. There is a crying need for it.

SPECIAL HANDLING OF PERSONNEL

Senator HILL. Would it not be possible to handle your personnel a little bit differently than ordinarily with the William A. White building, differently than you would in the other buildings in the clinical material which you draw from the whole hospital?

Dr. SHANNON. Yes.

Senator HILL. You draw your clinical material from the whole hospital, but I am saying the operation of the William A. White building might be on a different scale, might it not? What would be the answer to that?

Dr. SHANNON. Senator Hill, I will point out that it is on a different scale. They would supplement the facilities that are here. The problem comes with the interchanging of patients between this building and the remainder of the reservation. It is necessary with a limited budget to interchange hospital personnel, since the turnover of staff is great under this budget, and that precludes the development of a highly efficient, permanent staff as part of the St. Elizabeths Hospital.

NO PRESENT SOLUTION

Now I would also point out, and I think Dr. Felix would support me professionally on this, that we do not have a solution to propose

at this time. We are delighted that the Department is taking this under very serious consideration and have turned to us for advice on what might be done. We are hopeful that the solution that comes out of this consideration will permit the introduction of the research at a national center. This will depend on our research studies as they progress.

We are convinced from what we know of the operation of hospitals such as this, that under the present guidelines of financing over the long run this is quite impossible. However, I do not believe we would wish to give the impression that we are faced with this in the Department. We are not. We are talking as a result of 1 year's operation and on the basis of broad experience elsewhere and we feel that changes can be made, need to be made, and we hope that they will be made, Senator.

Dr. FELIX. I would agree with every word of that, Mr. Chairman.

Senator HILL. It is really now getting active attention?

SALARY FOR VISITING SCIENTISTS

Dr. VAN SLYKE. May I comment on something which does not touch the total problem but is still a serious matter and that is the retention of Dr. Elkes in this research environment at St. Elizabeths.

At present we are restricted to paying only \$15,000 as a top salary for visiting scientists.

Senator HILL. I was going to ask about that. I am glad to have you comment.

Dr. VAN SLYKE. I understand that the Department is considering submitting a supplement for this, but if this committee and Congress were willing to remove this \$15,000 limitation and set it at \$19,000, which would be in keeping with the increase in professional salaries over the many years, that would resolve a very serious problem and I would hope the committee would give this very serious consideration.

Dr. SHANNON. This would include other visiting scientists of very high level. I think Dr. Van Slyke mentioned Dr. Elkes as an example and I do not think he would wish anything other than the removal of the limitation in the language.

Senator HILL. Well, would you not like to have that \$15,000 stricken and insert in lieu thereof \$19,000?

Dr. SHANNON. No, sir. I believe if it were simply stricken and had nothing substituted, these positions would vie with all the other professional positions and this would be my recommendation.

Senator HILL. Well, as a practical matter, I think that you would be able to get more agreeable action of the Congress if you had some figure in there, Doctor, rather than if you had no figure at all.

The question would be then, how high would it go? Do you agree with me?

Senator SMITH. Yes.

Dr. SHANNON. I certainly agree with you.

Dr. BURNES. I would concur in his statement that it goes beyond Dr. Elkes, although that is our immediate problem.

Senator HILL. That is your immediate problem?

Dr. BURNEY. We are certainly fortunate in getting him, and we hope we can keep him. It is a serious problem because we are not able to compensate him in accordance with his abilities.

Senator HILL. Where you have people who are doing a kindred work and who would certainly be about at the same level of ability, you could not hold them, is that right?

Dr. BURNEY. That is right.

REPORT ON PROGRAM

Dr. FELIX. It might be helpful to the committee to have this report entitled "Special Report on the Clinical Neuropharmacology Research Program," which I could introduce, if you wish for the record, at this point.

Senator HILL. We will be happy to have it in the record at this point.

(The report referred to follows:)

THE CLINICAL NEUROPHARMACOLOGY RESEARCH PROGRAM

The past year has seen the first substantial steps toward the implementation of the program of the Clinical Neuropharmacology Research Center, a co-operative project of the National Institute of Mental Health and St. Elizabeths Hospital aimed at investigating the action and mode of action of pharmacological and other agents which affect mental function. Laboratories have been furnished, equipped, and stocked, instrumentation has proceeded apace and staff, representing a variety of scientific disciplines have been recruited, as well as a number of technicians and supporting personnel. Attention has been given to acquainting the staffs of both institutions, more particularly the staff of the William Alanson White Building where the project is housed with the main objectives of the research program, and to defining the roles and areas of responsibility of CNRC and SEH staffs in such a joint program.

CLINICAL EVALUATIONS

In line with the original aims of the program CNRC medical staff have assumed clinical responsibility for one or more wards of the William A. White service. These assignments are made in an effort to develop the kind of knowledge and appreciation of the patient population and of the hospital personnel and ward conditions upon which any realistic clinical research program in a mental hospital setting must of necessity be based. To serve the same end, investigators designed and carried out a study for the detailed characterization of some 330 patients in terms of personal, family, and social history, specific symptoms and treatment, including pharmacotherapy. Among other things, this study demonstrated the limitations of the existing hospital record system for use in clinical research. Preliminary steps are being taken with the records committee of SEH in the direction of supplementing existing records with others carrying relevant information in compact and readily accessible form.

Concomitantly with the above tasks, the clinical research staff have devoted attention to the definition of other problems of research methodology characteristic of large mental hospital populations. The foremost of these is the reliable recording of change in the patient, and the environment in which he functions. This subsumes the need for the characterization of patient behavior in simple, definite, and unequivocal terms; of quantifying these changes wherever possible; and of observing and recording systematically relevant variables of the hospital milieu. Although the former aspects have received the bulk of the attention of investigators to date, a promising beginning has been made in an approach to the study of milieu variables. The Laboratory of Socioenvironmental Studies, NIMH, in collaboration with CNRC investigators, is engaged in designing instruments and in planning a program for a large-scale survey of staff attitudes throughout the hospital. In addition, thought has been given to the development of schedules for recording the more tangible aspects of the

ward setting, its physical attributes, and staffing pattern, as well as the less tangible but highly important aspects of its social organization and modes of functioning.

COLLABORATIVE METHODOLOGICAL STUDIES

In evaluating the effectiveness of any therapeutic measure, the most difficult methodological problem is that of reliably assessing patient behavior. This dilemma is particularly poignant in a mental hospital setting because of the stringent limitations of time and personnel. For this reason the problem of serial assessment of behavior continues to be a focal point of interest. In conjunction with staff of the Biometrics Branch, NIMH, the Laboratory of Socio-environmental Studies, NIMH, and the chief statistician of the hospital, a detailed review has been made of some 23 rating procedures now in use or under consideration; a comparison of their content and formal attributes has been made; and an empirical test of the applicability of some of these scales in the St. Elizabeths setting is underway. Although far from complete, it is already apparent that none of the existing procedures fully meets the needs of the program and that it will be necessary to develop more useful techniques for the purpose.

STUDIES IN CHEMICAL PHARMACOLOGY AND NEUROENDOCRINOLOGY

Prior to the completion of CNRC laboratories in July 1958, a biochemist on the staff working in collaboration with an NIMH pharmacologist at Bethesda carried out a project aimed at determining the levels of plasma adrenochrome in schizophrenics. These scientists developed a sensitive and specific fluorimetric method capable of detecting minute amounts of adrenochrome. Blood adrenochrome levels in 6 normal volunteers and 11 schizophrenic patients were determined. The values obtained in both groups were strikingly low, and were at variance with the results reported elsewhere. No elevated adrenochrome levels were found in the schizophrenic patients.

Another senior member of the staff collaborated on an investigation of the permeability of the blood brain barrier for tritium-labeled epinephrine and the uptake of epinephrine by other tissues. The results clearly indicated that the uptake of epinephrine by the brain was extremely slow in contrast to the rapid uptake in other tissues. The possibility that some circumscribed regions of the brain such as the hypothalamus could take up epinephrine at a rate higher than other regions has not yet been completely excluded; but, at best, it must be regarded as an extremely slow process.

The animal facilities of the CNRC have only recently become available. Since neuroendocrinological studies depend heavily upon these facilities, this area of the program is just getting underway. Two joint studies are planned which will center on the behavioral and hormonal effects of drugs and hormones applied locally to selected areas of the brain of animals. It is also hoped to develop further the methodology for the assay (both chemical and biological) of plasma hormone levels, correlating a number of studies which would apply such procedures to the experimental as well as the clinical field.

NEUROPHYSIOLOGICAL STUDIES (THE BRAIN AS AN ORGAN OF INFORMATION)

Another group of investigators has as its objective an analysis of the coding of information along a sensory pathway, and the role of patterned inhibition in this coding process. This is being studied in the auditory pathway, in view of the information already available concerning physiological properties of this pathway. Using implanted microelectrodes in the conscious unanaesthetized animal, the group are studying the responses of the auditory cortex to stimuli which although not constant are nevertheless mathematically tractable. The results are being linked to previous findings obtained at subcortical levels of the auditory pathway and to responses obtained at the cortical levels by the use of gross electrodes. Similarly, microelectrode techniques are being used in studying the responses of single units in the inferior colliculus during activation by two stimuli presented to the same, or different, ears. The effect of drugs on the inhibition and latency of response under various conditions is also being studied. It is hoped that the results may throw light on the nature of the inhibiting process which makes for directional orientation toward sound. Related studies are proceeding in the exploration of single-unit responses in the auditory nuclei of the pigeon, a species chosen because of the striking difference of its cochlear

structure, and the problems posed by these differences in terms of the compensatory function of its neural organization. It is hoped that these and cognate studies may in time lead to the definition of some general principles underlying the regrouping and processing of sensory information by the higher nervous system. Since the coding of sensory information may well be disturbed (and, possibly, be chemically disturbed) in some forms of acute mental disorder, a definition of such general principles may be expected to contribute to the design of further experiments aimed at testing specific hypotheses in man.

BEHAVIORAL AND OTHER MULTIDISCIPLINARY STUDIES

A further area now being developed is a multidisciplinary study in cats, rats, and monkeys of the effect of drugs and hormones applied locally to selected areas of the brain by micro implantation or micro pipette. These effects will be studied in terms of the animals' hormonal and behavioral response. A program is also underway to study the effect of the chronic administration of selected drugs on performance, and to follow these effects in terms of their possible chemical correlates. With the completion of the survey of the clinical material in the William Alanson White service it is hoped to develop long-term studies on the effects of drugs (both in chronic administration, and in acute experiment) on selected parameters of psychological function in men.

In addition to the above studies a number of long-range projects are being planned in collaboration with scientists in other Laboratories and Institutes of the NIH. These studies will be designed to take maximal advantage of the rich resources of the clinical setting at SEH. The total yield of data from all these efforts will hopefully provide a theoretical framework for the understanding of the varied effects of drugs on mental processes in man.

NATIONAL INSTITUTION FOR MENTAL RESEARCH

Senator SMITH. Mr. Chairman, in thinking of the basic needs in this matter of increasing mental problems, do I understand from what Mr. Kelly has said that there should be a national institution for research in mental diseases and that St. Elizabeths could be used if current restrictions on financing could be overcome and additional support obtained?

Mr. KELLY. Of course, we have the National Institute of Mental Health. The feeling is that St. Elizabeths Hospital is more than a hospital for the mentally ill for the District of Columbia, but was, and could again be, a national demonstration center as to how a first-class institution can be run and avail itself of all the modern knowledge and to show the State institutions what can be done to get people out of mental institutions.

But the current method of financing and budgetary restrictions on St. Elizabeths Hospital no longer give us that kind of hospital. We are hoping to arrive at some kind of solution to restore it to the national and even international prominence which it once had.

Senator SMITH. What you are saying is, it would still be a District of Columbia institution but serve as an example of a model institution to the country?

Mr. KELLY. Of course, it is today a Federal institution, but, three-fourths of its patients are mental patients of the District of Columbia and it would continue to draw its patients from the District of Columbia; but, as a Federal institution, it would recognize this Federal interest in its financing to a greater degree than it does today.

Senator SMITH. So there would not be a need for another District of Columbia mental hospital?

Dr. FELIX. No, Senator Smith. It might be helpful if I pointed this out: I do not think this would be a second National Institute of

Mental Health or a replacement for it, or we for them, but there are many types of research in which large numbers of patients are needed.

At the Clinical Center we have 73 beds and we conduct detailed studies on a selected few patients, which is the first step, but then there is a need for a larger scale clinical trial or study.

In addition to this, there is a crying need to test out new developments, not only as they appear in this country, but as they come to us from abroad, on different ways of establishing wards, dealing with patients, and there is need here for a number of wards in a whole building. It is important to try this out on about a thousand patients, not on 10 patients.

Also, with this kind of an active program, superintendents, clinical directors and other personnel of hospitals all over the country could come here for 2 weeks or 2 months or 6 months, whatever it might be, to study these methods and carry them back to their own States.

All of this is something the Clinical Center could not possibly do. It is not constructed in that way and not designed administratively to do it.

Senator SMITH. All of this is under consideration by the Department?

Dr. BURNEY. Yes.

TIME ELEMENT INVOLVED

Senator SMITH. Do you have any idea as to the length of time that will be involved before anything comes out of it? Are you actively engaged in this or is it something that does not have priority?

Dr. BURNEY. Of course, the service does not have the responsibility for this because St. Elizabeths is a separate operating agency. All we have done is to offer our assistance to them in their study.

I would have to defer to Mr. Kelly as to any time schedule on this. I frankly do not know what the schedule is.

Mr. KELLY. I can say this to you, Senator Smith: It is under the most active consideration, but there are some almost insurmountable obstacles in arriving at a solution of whether or not we will be able to bring before you a new proposal on the financing of St. Elizabeths Hospital in 1961.

Senator HILL. Is there anything else you would like to say, Doctor?

TRAINING SERVICE PERSONNEL

Dr. SHANNON. Senator Hill, I would like to go back to one point that Dr. Felix raised in that most people look at the National Institutes of Health and their program as one for research. I think Dr. Felix's program, above all others, has a function which is not commonly recognized.

I mention it now to emphasize it and place it in the record because we are just now undertaking a serious study of our training programs. The more we study them the more we realize that a very important part of our training perhaps is in the field of training service personnel.

Many of the advances, and this is particularly true of mental health, many of the advances that have been made in the past 5 years

or so could not have in fact been applied today because of the absence of trained personnel.

Many of the advances that have taken place in the past 5 or 10 years in the handling of the mentally ill across the country could not have taken place in the past had these service personnel training programs not gone forward.

This is a point we emphasize because people do not realize how critically short certain of these areas are. I can point out that in our own Public Health Service hospitals we are close to the verge of having our accreditation withdrawn, at Fort Worth and one other place, and we cannot provide adequate psychiatric care to our Federal patients; so that I emphasize this because this does not appear to be glamorous, it does not attract attention, but I think the Mental Health Institute, of all of our institutes, has done an extraordinarily superior job in attempting to satisfy the service needs of our areas, quite apart from the research areas.

INCREASING SERVICE DEMANDS

Dr. FELIX. I might point out, Senator Smith, that one of the things that gives us considerable concern is that the population projections for the year 1975 indicate something over 220 million people. We are short even now of persons to take care of these sick people over the country, both in hospitals and out of hospitals. We will probably be considerably shorter by 1975 if we do not get about the business of training these people for service pretty soon, because 1975 isn't a long way off. Even I might live to see it, and this is what has me worried.

Dr. SHANNON. I might say, Senator Hill, and this is again not to express dissatisfaction, but the position we find ourselves in and to emphasize again that these programs do have service responsibilities as well as research responsibilities, and we hope to prepare for the Department a series of long-range projections relative to training in this area, as we do and as we have in the past presented projections for the training of research personnel.

Dr. FELIX. I would not want the implication to be drawn that I am speaking to any increases. I am not. I am just stating a situation.

Senator HILL. You are just giving us the picture and we can draw our own conclusions?

Dr. FELIX. Yes, sir.

Senator HILL. That would be a normal reaction, would it not?

Dr. FELIX. Knowing you from the past, I would say "Yes."

Senator HILL. Senator Smith.

Senator SMITH. I would say that Dr. Felix is being very realistic in his statements.

Senator HILL. Are there any questions or anything else you would like to say?

Dr. BURNEY. I would like to add to what Dr. Shannon said about the service program, that we have had the situation with Dr. Felix of having several requests from the States for him to loan personnel, which you know we have done for many years, and we have had to turn those down because we do not have the people to even staff our own programs.

We have not been able to meet our needs for psychiatrists for our regional offices. As Dr. Shannon mentioned, we also lost an accreditation at Lexington where we train residents, and if we do not train our own people, we cannot pay salaries for people at these other places.

At Fort Worth, we would like to establish a residency program, and do not have a psychiatrist there that would qualify the Institute.

As Dr. Shannon mentioned, he and Dr. Felix both have a great deal of interest in trying to help ourselves and help the States at the same time. As I said, it is not dramatic, but extremely important to the service.

Senator SMITH. And with the increase in population you will have this additional need.

Senator HILL. With the increase in population and the increase in the aging, the average age.

All of these present problems, do they not, Doctor?

Dr. FELIX. As to the aging, there are two age groups that are thought to have the greatest increase, the groups 65 and over, and from 15 to 34. These are the two groups, one for the younger diseases such as schizophrenia and the other is for the diseases of the elderly. Those are the two areas of our problems.

Thank you, Mr. Chairman. It has been a pleasure, as always, to have this opportunity to appear before you.

NATIONAL HEART INSTITUTE

STATEMENT OF DR. JAMES WATT, DIRECTOR, NATIONAL HEART INSTITUTE; ACCOMPANIED BY DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For expenses necessary to carry out the purposes of the National Heart Act, **[\$45.613,000]** \$45,594,000."

Amounts available for obligation

	1959 appro- priation	1960 budget estimate	1960 House allowance
Appropriation or estimate	\$45,613,000	\$45,594,000	\$52,744,000
Deductions:			
Comparative transfer to "Assistance to States, general"	-19,000	0	0
Unobligated balance, estimated savings	-45,000	0	0
Total obligations	45,549,000	45,594,000	52,744,000

Obligations by activities

Description	1959 appropriation		1960 budget estimates		1960 House allowance	
	Posi-tions	Amount	Posi-tions	Amount	Posi-tions	Amount
1. Grants:						
(a) Research projects.....		\$24,616,000		\$24,643,000		\$29,775,000
(b) Research fellowships.....		2,163,000		2,163,000		2,663,000
(c) Training.....		7,152,000		7,152,000		7,879,000
(d) State control programs.....		2,125,000		2,125,000		2,125,000
2. Direct operations:						
(a) Research.....	480	7,327,000	480	7,266,000	514	7,797,000
(b) Review and approval of grants.....	51	754,000	51	790,000	63	920,000
(c) Training activities.....	17	154,000	17	154,000	17	154,000
(d) Professional and technical assistance.....	104	1,056,000	104	1,101,000	112	1,226,000
(e) Administration.....	19	202,000	19	200,000	19	205,000
Total obligations.....	671	45,549,000	671	45,594,000	725	52,744,000

Obligations by objects

Object classification	1959 appro-priation	1960 budget estimate	1960 House allowance
Total number of permanent positions.....	671	671	725
Full-time equivalent of all other positions.....	13	13	14
Average number of all employees at end of year.....	619	624	671
Number of employees at end of year.....	655	661	707
01 Personal services.....	\$4,157,200	\$4,207,700	\$4,511,700
02 Travel.....	217,000	217,000	242,500
03 Transportation of things.....	43,000	43,000	51,100
04 Communication services.....	41,000	41,000	41,000
05 Rents and utility service.....	11,000	11,000	11,000
06 Printing and reproduction.....	41,000	41,000	43,000
07 Other contractual services.....	519,800	519,800	617,800
Reimbursements to "National Institutes of Health management fund".....	3,640,000	3,573,000	3,738,000
08 Supplies and materials.....	428,000	460,000	515,600
09 Equipment.....	261,000	261,000	377,700
11 Grants, subsidies, and contributions.....	36,056,000	36,083,000	42,442,000
Contribution to retirement fund.....	135,000	137,500	152,500
15 Taxes and assessments.....	21,000	21,000	22,100
Subtotal.....	45,571,000	45,616,000	52,766,000
Deduct charges for quarters and subsistence.....	22,000	22,000	22,000
Total, National Heart Institute.....	45,549,000	45,594,000	52,744,000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	675	\$45,613,000
Transfers: Comparative transfer to "Assistance to States, general".....	-4	-19,000
Adjusted 1959 appropriation.....	671	45,594,000
Deduct unobligated balance, estimated savings.....		-45,000
1960 base.....	671	45,549,000
1960 appropriation request.....	671	45,594,000
Net change requested.....	0	+45,000

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Decreases:				
Reduction in temporary employment to absorb part of cost of extra day of pay.....		\$1, 100		\$1, 100
Net change in reimbursement to National Institutes of Health management fund.....		67, 000		
Subtotal decreases.....		68, 100		1, 100
Increases:				
For mandatory items:				
Extra day of pay (261 days in 1959 and 262 days in 1960).....		10, 400		10, 400
Annualization of 43 new positions authorized in 1959.....		43, 700		43, 700
Subtotal mandatory increases.....		54, 100		54, 100
For program items:				
Research projects in arteriosclerosis, hypertension, heart failure, etc.....		27, 000		5, 159, 000
Research fellowship awards.....				500, 000
Training grants in cardiovascular disease fields.....				727, 000
Direct research:				
Procurement of whole blood.....		32, 000		32, 000
Studies in radioisotopes, the aging process, geographic pathology, etc.....			34	415, 000
Cost of increased review and approval services.....			12	86, 000
Increase in professional and technical assistance activities.....			8	125, 000
Net change in reimbursement to National Institutes of Health management fund.....				98, 000
Subtotal program increases.....		59, 000	54	7, 142, 000
Total change requested.....		+45, 000	54	7, 195, 000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$7,150,000 for the National Heart Institute. As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Activity No. 1(a)—Research projects

The full amount requested of \$24,643,000 was allowed by the House, and an additional amount of \$5,132,000 was recommended for support of research projects in the areas of arteriosclerosis, hypertension, rheumatic heart disease, heart failure, and other cardiovascular categories. This is an increase of \$5,159,000 over the 1959 appropriation.

Activity No. 1(b)—Research fellowships

The full amount requested of \$2,163,000 was allowed by the House, and an additional amount of \$500,000 was recommended for support of research fellowship awards.

Activity No. 1(c)—Training

The full amount requested of \$7,152,000 was allowed by the House, and an additional amount of \$727,000 was recommended for support of training programs in fields concerned with the study, prevention, and treatment of cardiovascular disease.

Activity No. 2(a)—Research

The full amount requested of \$7,266,000 and 480 positions was allowed by the House, and an additional amount of \$531,000 and 34 positions was provided for heart research. This is an increase of \$470,000 over the 1959 appropriation. The additional funds of \$531,000 provided by the House will be utilized for development of instruments and methodology; studies of biogenesis and metabo-

lism of amines; studies in radioisotopes; expansion of research in the aging process; and additional field studies in geographic pathology.

Activity No. 2(b)—Review and approval of grants

The full amount requested of \$790,000 and 51 positions was allowed by the House, and an additional amount of \$130,000 and 12 positions was provided in connection with grant program increases. This is an increase of \$166,000 over the 1959 appropriation.

Activity No. 2(d)—Professional and technical assistance

The full amount requested of \$1,101,000 and 104 positions was allowed by the House, and an additional amount of \$125,000 and 8 positions was recommended in support of consultative services and development of new techniques for control of heart disease. This is an increase of \$170,000 over the 1959 appropriation.

Activity No. 2(e)—Administration

The full amount requested of \$200,000 and 19 positions was allowed by the House, and an additional amount of \$5,000 was provided for program direction needs. This is an increase of \$3,000 over the 1959 appropriation.

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

Allocations of grant-in-aid funds for heart disease control

State or Territory	1958 allocations	1959 allocations	Estimated 1960 allocations	State or Territory	1958 allocations	1959 allocations	Estimated 1960 allocations
Alabama.....	\$55,400	\$54,200	\$53,400	New Hampshire....	\$14,600	\$14,600	\$14,700
Alaska.....	12,000	11,900	12,000	New Jersey.....	49,000	49,700	50,100
Arizona.....	19,600	20,200	20,500	New Mexico.....	18,300	18,400	18,200
Arkansas.....	37,900	36,500	35,700	New York.....	130,800	126,000	124,300
California.....	108,500	109,700	110,700	North Carolina....	69,300	68,800	68,500
Colorado.....	23,900	24,400	24,700	North Dakota.....	17,000	16,900	16,800
Connecticut.....	24,400	24,200	24,300	Ohio.....	82,900	82,700	83,000
Delaware.....	12,000	12,200	12,200	Oklahoma.....	34,100	34,000	33,600
District of Columbia.....	15,400	15,200	15,100	Oregon.....	24,400	24,800	24,900
Florida.....	48,500	50,400	53,000	Pennsylvania.....	105,200	104,600	103,400
Georgia.....	57,000	56,500	56,200	Rhode Island.....	16,200	16,500	16,600
Idaho.....	15,700	15,800	16,000	South Carolina....	43,100	43,100	43,600
Illinois.....	79,600	80,000	80,800	South Dakota.....	17,300	17,500	17,300
Indiana.....	48,100	48,700	48,600	Tennessee.....	55,700	54,400	53,300
Iowa.....	36,000	37,100	37,300	Texas.....	101,700	102,100	102,700
Kansas.....	29,500	29,700	29,600	Utah.....	17,500	17,900	18,000
Kentucky.....	49,100	48,500	48,400	Vermont.....	13,000	13,000	12,900
Louisiana.....	46,600	46,300	45,700	Virginia.....	48,600	49,200	50,400
Maine.....	18,900	19,000	19,100	Washington.....	31,300	31,600	31,900
Maryland.....	32,600	32,900	33,300	West Virginia....	34,000	33,500	32,600
Massachusetts....	48,500	48,200	47,300	Wisconsin.....	43,700	44,500	45,100
Michigan.....	69,100	70,400	70,900	Wyoming.....	11,900	11,900	11,900
Minnesota.....	41,000	41,500	41,400	Hawaii.....	14,300	14,500	14,800
Mississippi.....	47,500	47,600	47,100	Puerto Rico.....	50,100	49,000	48,800
Missouri.....	49,300	48,600	48,000	Virgin Islands....	2,400	2,400	2,400
Montana.....	14,800	15,100	15,300	Guam.....	3,500	3,800	3,800
Nebraska.....	23,200	23,700	23,600				
Nevada.....	11,000	11,100	11,200	Total.....	2,125,000	2,125,000	2,125,000

PREPARED STATEMENT

Senator HILL. We will now hear from Dr. Watt, Director of the National Heart Institute.

Doctor, we welcome you here and we would like to have you proceed in your own way.

Dr. WATT. Thank you, Mr. Chairman; I have an opening statement prepared to be submitted to the committee. I would like to do that and, if I may, summarize my statement.

Senator HILL. We will put your statement in full in the record at this point.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, NATIONAL HEART INSTITUTE, PUBLIC HEALTH SERVICE,
ON NATIONAL HEART INSTITUTE

Mr. Chairman and members of the committee, this statement will review for this committee progress made by the National Heart Institute in its mission to achieve workable methods for the prevention and treatment of cardiovascular disease. Many aspects of the 20 or more disorders of the heart and blood vessels continue to baffle the best minds in medical research. Nevertheless we are moving ahead in the achievement of both long-term and short-term goals. Altogether this present year has been a fruitful one. Basic and clinical research efforts have grown both in our own laboratories in Bethesda and in institutions receiving grant support throughout the country. Too, the application of what we now know about heart disease has been considerably expanded in many areas, and greater emphasis has been placed on community services for the cardiac patient. New programs designed to increase the number and quality of trained scientific investigators, teachers, and skilled physicians were initiated during the past year.

Some of the accomplishments and developments of the National Heart Institute's total program which have occurred during the current year are set forth in the ensuing pages of this statement. The 1960 request is for \$45,594,000 which, with comparative transfer is the same as 1959, but \$45,000 greater than the 1959 obligation plan.

HEART DISEASE TODAY

Mortality from diseases of the cardiovascular system increased in 1957 over the previous year—876,793 deaths in 1957 compared to 843,410 deaths in 1956. This increase in the total number of deaths from cardiovascular disease is attributable to the epidemic of influenza during the fall of 1957. Preliminary information indicates that the cardiovascular death rate for 1958 will approximate the rate for 1957. This is because the high level of mortality at the close of 1957 carried over, along with the influenza epidemic into the first 3 months of the year just ended. Percentagewise, however, the death rate remains the same. Fifty-four percent of all deaths in the United States are caused by some form of cardiovascular disease. The major component, arteriosclerotic heart disease—which includes coronary disease or “heart attack”—was responsible for 452,507 deaths. In second place was cerebrovascular lesions (circulatory failure in the brain and “strokes”) with 187,709 deaths. Hypertension was third—83,500 deaths with or without accompanying heart disease—a decrease from a year ago, of almost a thousand deaths. A recitation of these figures points up the weighty problems presented by diseases of the heart and blood vessels and continues to demonstrate the difficulties encountered in solving them. However, recent discoveries and new developments, such as those in drug therapy for high blood pressure, and new advances in the field of surgery, have added to the existing body of knowledge of the various heart and blood vessel diseases.

DIRECT RESEARCH

The intramural research program of the National Heart Institute is devoted to adding to the fund of basic biochemical and physiological knowledge from which fuller understanding of disease must come. It is also concerned with the application of such knowledge, to the prevention and treatment of diseases of the heart and circulatory system, where sufficient development permits. Simultaneously work is carried on at the more applied level in the improvement of diagnostic methods, in increasing knowledge of the nature of disease processes and in the development of better methods of treatment. These two approaches, from the fundamental level and from the clinical level, complement and foster each other and continually narrow the gap between them.

Hypertension

A striking example of the unforeseen application of basic studies to immediate therapeutic benefit has arisen within the last year in the treatment of hypertension (high blood pressure). As a result of fundamental biochemical studies undertaken several years ago, a new and highly promising series of drugs is under study in patients with hypertension. If preliminary studies are supported by more extensive clinical trial these drugs should provide a major

improvement in the treatment of severe hypertension. The biochemical studies were directed at clarifying the mechanisms by which certain physiologically active substances are produced and destroyed in the body. As a result of these investigations the chemical pathways by which serotonin and epinephrine are produced and metabolized were defined and the enzymes (protein catalysts) concerned were identified. It was found that an enzyme known as monoamine oxidase plays a central role in the destruction of these active substances and that a number of chemicals have the property of inhibiting this enzyme. It was observed that when such inhibitors were given to patients, the ability of the individual to regulate his blood pressure was impaired and his standing blood pressure was markedly lowered. Drugs with the ability to produce such "postural hypotension" have been found useful in the management of severe hypertension, and trial of active members of the new group of monoamine oxidase inhibitors was a logical step. Trial of the most active such agent in clinical center patients has indicated that, barring the development of unpredictable side effects, this drug is a marked improvement over previous drugs with similar blood pressure lowering effects since the new drug can be given in a single daily dose with continuous and reproducible action and unlike those which it may well supersede, it does not produce such undesirable effects as severe constipation and sexual impotence.

The effectiveness of monoamine oxidase inhibitors in hypertension is not the only useful product of basic research on the metabolism of serotonin and epinephrine. The role of these substances in the central nervous system control of blood pressure and other "sympathetic functions" has been the subject of intensive and productive research. Drugs which modify the distribution and activity of these potent chemicals in the brain have been found to be very useful in the management of hypertension and particularly in the treatment of mentally disturbed patients.

Despite the improvement in the outlook for patients with high blood pressure resulting from the development of increasingly effective drug treatment, the underlying cause of most forms of hypertension remains obscure and treatment is presently directed largely at the results of, rather than the disease itself. Studies directed at improved understanding of the fundamental disturbance are being continued; investigation of several components of the blood (callicrein, callidinogen, calledin) which appear to be present in increased amounts in patients with hypertension, are being carried out in attempts to identify their nature, function, and possible significance.

Atherosclerosis

As the underlying cause of coronary occlusion (heart attacks) and cerebral thrombosis (stroke) atherosclerosis is the cause of more deaths than any other single disorder. Characterized by the deposition of fatty materials in the walls of blood vessels, atherosclerosis produces narrowing of the blood channels and predisposes to the formation of clots which may completely cut off flow. When this occurs, the tissue supplied by the vessel concerned is deprived of oxygen and generally does not survive.

Although considerable advances have been made in recent years in our understanding of factors predisposing to the development of atherosclerosis, many gaps remain to be filled and adequate and reliable means of prevention are yet to be developed. The most fruitful area of research appears to be in the study of the handling of fatty substances in the body since abnormalities of the concentrations of various fats in the blood have been more consistently noted to be associated with the development of atherosclerosis than any other disturbance. Rapid advances have been made in our understanding of the long-neglected field of fat metabolism but the picture is far from completed. Contributions of the intramural research program in the last year have been the development of a highly sensitive and reliable detection device for gas phase chromatography—a method for the separation and identification of the components of fat mixtures. Fats as they occur in nature are varying mixtures of a number of substances. Since each of these may be treated differently in the body, studies in the past have been hampered by an inability to consider each component separately. The new technique should greatly improve this situation and make progress more rapid.

The adrenal hormone, epinephrine, has been found to have two distinct effects on fat metabolism. By a direct effect on fatty tissues, it causes a release of unesterified fatty acids, the building blocks of fatty tissue, to the blood. This effect is antagonized by increase of the blood sugar level, and since the latter

is one of the actions of epinephrine, this effect is self-limited. However, a second more persistent effect is a marked increase in the cholesterol-bearing fat-protein complexes of blood. This may explain the stress-induced elevation of blood cholesterol which has been noted in accountants at income tax deadlines and students at examination time and could conceivably provide an explanation of what relationship, if any, exists between stress and coronary disease.

Advances have been made in knowledge concerning the source, interchangeability and some aspects of the chemical structure of the proteins which carry the water-insoluble fats in the blood.

The search for drugs which can inhibit the manufacture of cholesterol in the body has continued. Several such compounds have been studied, but as yet none has been found sufficiently free of toxic side effects to be considered promising. It is, therefore, not yet certain whether this will prove a practical approach to the reduction of blood cholesterol and possibly to the prevention or treatment of atherosclerosis.

Congestive heart failure

This symptom complex results from many forms of heart disease when the heart muscle is no longer able to produce the forcible contractions required for the output needed to maintain an adequate circulation. Shortness of breath and waterlogging of the tissues (edema formation) are the most prominent symptoms. Studies of this disorder, its genesis and management, have been particularly concerned with two aspects: (1) the normal regulation of the force of heart contraction and output and its therapeutic modification, and (2) factors responsible for the abnormal handling of salt and water by the kidney which leads to the formation of edema.

A new method for measuring the velocity of blood flow makes possible the assessment of the time-force (power) output involved in heart contraction in intact man. Adapted to the familiar heart catheter, the method employs direct electronic computer technique to integrate two pressure measurements to yield a measure of instantaneous velocity throughout the heart cycle.

Studies in experimental animals have shown the force of heart contraction to be regulated under normal conditions by nervous control responsive to pressure changes in certain arteries supplying the head. The very striking effect of these nervous influences on heart contraction have stimulated interest in the possible imitation of these actions with available drugs. The therapeutic action of such drugs (adrenergic and norepinephrine types), in patients with heart failure is being evaluated.

The abnormal retention of salt by the kidney which leads secondarily to the accumulation of water and formation of edema has in previous studies been shown to be dependent upon increased secretion of aldosterone, a hormone of the adrenal cortex. However, the sequence of mechanisms leading to the increased aldosterone secretion had not been clarified. A new link in the chain has now been established in the demonstration, by cross-circulation between experimental animals, that the secretion of aldosterone is controlled by a new and as yet unidentified hormone present in the circulation of the edema-forming animal. Studies aimed at the isolation and identification of the hormone and the determination of its source in the body are underway.

Surgical approaches to heart disease

Until adequate preventive measures are conceived and adopted there will continue to be a sizable group of patients with anatomical abnormalities of the heart whose lesions are at least theoretically amenable to surgical correction. This is particularly true of congenital and rheumatic heart disease. Since adequate means for the prevention of rheumatic fever are available, it is to be expected that the number of cases of chronic heart disease resulting from rheumatic fever and requiring surgery will decrease progressively. No such decrease in congenital heart disease is anticipated. Meanwhile the variety of congenital heart disease (which assumes many forms) amenable to surgical treatment is gradually increasing as improved methods are developed for substituting for the patient's heart and lungs during open-heart surgery and as new surgical techniques are devised. An important part of the surgical approach to heart disease is in the diagnostic evaluation of patients to determine the nature and severity of the lesions. Such information provides answers to three vital questions: (1) Is the lesion amenable to surgical correction with present techniques? (2) Is the lesion severe enough to warrant surgical correction at

this time or can it await the further improvement in surgical technique which is occurring so rapidly? (3) What operative approach and what auxiliary techniques, such as reduced body temperature and heart-lung machine, are required?

The Heart Institute program in this area has made particularly significant contributions to the improvement of diagnostic and evaluative procedures. The most important development during the past year has been a technique for detecting and quantifying abnormal shunting of blood between the left and right side of the heart. Based on the use of the radioactive inert gas, krypton 85, the method depends upon the fact that this gas is very rapidly taken up by the tissues when inhaled and very rapidly given off in the lungs when injected into a vein. Thus when it is injected into a vein, its appearance in arterial blood (which has since traversed the lungs) is an approximately quantitative indication of short circuiting of the lungs—that is, an abnormal communication with movement of blood from the right side of the heart to the left. Conversely, if the gas is inhaled, its early appearance in the venous blood is an indication of movement of blood from left to right heart since all of the venous blood would normally have lost its krypton in passing through the tissues. Since such short-circuiting movements are common in a number of forms of heart disease and since the size and location of such shunts are critical factors in selecting surgical procedures, the importance of such techniques is apparent.

EPIDEMIOLOGY

The epidemiological approach to the problems of heart disease continues to be emphasized in all phases of the Institute program. Much data now available is being analyzed and further knowledge will undoubtedly help to clarify many of the factors related to heart disease. The Framingham study, which is really the pioneer effort in this approach, continues along its planned course. Investigations of hypertensive heart disease in this Massachusetts community have produced some interesting data. Heart enlargement, which is one of the marks of heart damage used in defining hypertensive heart disease, has been shown in Framingham to be evident at all blood pressure levels, even the very lowest, but becomes increasingly common as the blood pressure rises.

Other studies using the epidemiological approach have been developing and are of interest. One, completed this year in North Dakota, through the technical assistance program of the Institute—was designed to explore the possible relationship of diet, heredity, weight, smoking and stress to coronary disease. While this particular study failed to reveal any association between diet and coronary disease, it should be emphasized that this finding is based on only one study and points up the fact that more refined methodology is a constant objective of the epidemiologist. In a companion study in Connecticut, emphasis is being placed upon the relationship between stress and personality factors. Preliminary findings indicate that coronary cases generally differ from controls in respect to these variables.

Progress in epidemiology continues to be made along other fronts. The meeting held this past summer in Geneva, supported by a Heart Institute grant and sponsored by the World Health Organization, is one example of the increasing awareness among researchers concerned with cardiovascular diseases of the potential value that lies in this community approach to the problems of heart disease. Mention should also be made of the epidemiological conference scheduled for April 1959 at Princeton, N.J. Cosponsored by the National Heart Institute and the American Heart Association, this meeting will bring together many of the Nation's top epidemiological investigators of cardiovascular disease. These experts will explore and discuss at length better and more refined methods of study, new areas for investigation, and a host of other problems peculiar to this specialized area.

RESEARCH GRANTS

There have been many interesting and promising developments during the past year flowing from the laboratories of institutions and individual investigators supported by Heart Institute research grants. The following are a few of these many achievements casting new light, creating new approaches to some problems of heart disease that still remain to be solved.

Arteriosclerosis

No single factor has thus far emerged as determinant in the etiology of atherosclerosis. Diet, the endocrine glands, and genetic influences still seem to be in the

forefront. Studies of population groups suggest that the differing incidence of atherosclerosis among various peoples is related to differences in their way of life. Though fat metabolism seems implicated in this disease, there is growing reluctance to assign too great importance to dietary fats alone, and more recognition is being given to the possibility that the relative amount of fat in the diet is at least equally important.

The ideal drug for consistently lowering cholesterol levels in the blood has not been found thus far. However, a very real possibility exists that such agents, being closely related to cholesterol, may themselves on extended use prove atherogenic. A newer approach lies in the direction of finding agents capable of mobilizing cholesterol and other lipids from atherosclerotic deposits in the body. The discovery of a mechanism to effect this lipid mobilization in rabbits may develop into a real breakthrough in therapy.

The diagnosis of atherosclerosis centers mainly on determinations of blood lipoprotein levels for their prognostic value in large-scale screening, in epidemiologic studies and on visualization of coronary narrowing. A new method has been devised for determining human serum beta lipoproteins. Simple, rapid, and accurate, it requires only small amounts of serum and should provide a means for rapid evaluation of serum lipoproteins in large populations. Another important diagnostic tool is the new technique for visualizing the coronary arteries by injecting contrast media into the aorta during induced cardiac arrest and total occlusion of the ascending aorta. This method has proven safe and effective in animals and is being applied clinically.

In the surgical treatment of intractable angina pectoris, the development of new methods and the evaluation of their effectiveness continues. Circulation to the myocardium may now be improved by a variety of procedures—chiefly by opening up new intercoronary communications. One new surgical procedure to relieve patients suffering from severe intractable angina pectoris has been described and although only a few such operations have been performed, the survival rate has been high and relief has varied from partial to complete. A set of instruments designed for use in this type of surgery is now available to the vascular surgeon.

Hypertension

New clues continue to shed light on the causes of hypertension. The relationship between psychological stress and hypertension in humans has been further elucidated, particularly regarding the prognosis of the disease. A 5-year study of the environmental aspects of the disease has been concluded. A massive amount of data has been gathered on the precursors of hypertension among a predominantly Negro population composed of medical and nursing students in Tennessee. During the first year of a study seeking the reason for the high incidence of hypertension in West Indian Negroes, a complete census was taken of the population of an area in Nassau and a blood pressure survey of a segment of this population was made and compared with others of several smaller island populations. It revealed marked differences in the prevalence of this disease.

Prominent among investigations of the medical treatment of hypertension is the only long-term run on hexamethonium, a drug whose effects have now been observed in a large group of patients for periods up to 8 years. Newer drugs continue to be tested clinically but a longer period of time is needed to properly evaluate their usefulness. Among these are hydrochlorothiazide, some of the newer tranquilizers, and some monoamine oxidase inhibitors.

According to a study of the effects of radical dietary treatment of hypertension, patients on a stringent rice diet have a survival rate of 85 percent during followup periods running from 2 to 12 years, as compared with a 30-percent survival in those not on this stringent diet.

Rheumatic fever and rheumatic heart disease

Studies relating to the prophylaxis of rheumatic fever have compared the relative effectiveness of various antibiotics in eradicating beta hemolytic streptococci in the throats of afflicted patients. Although penicillin continues to be the drug of choice, there is some indication that low doses of this antibiotic over long periods of time in rheumatic fever prophylaxis may be a factor in the dangerous increase of antibiotic-resistant staph infections.

In surgery for rheumatic heart disease, refinements in the instruments used in the so-called purse-string procedure have markedly improved this operation. As a result, it can now be performed with greater safety and less trauma. On

a large group of patients with mitral stenosis, statistical analysis is now under-way with respect to such factors as survival, degree of improvement, and effectiveness of operating procedure. In the condition known as aortic stenosis, the introduction of a new surgical procedure to correct it has resulted in a 10-percent decrease in operative mortality. Of those who survive the operation, about 70 percent have shown very substantial improvement.

Cerebrovascular and peripherovascular disease

Although the problems of cerebrovascular and peripherovascular disease include the problems of atherosclerosis in general, special activities in these areas deserve particular attention. Data from a large series of autopsies reveal that males are more predisposed to cerebral thrombosis than females. But this male predisposition is not nearly so marked as that which occurs with coronary thrombosis. Male predisposition to cerebral thrombosis appears to decrease in the older age groups. The same is true of coronary thrombosis. Now in progress is a long-term followup study on patients with cerebral thrombosis in whom treatment with various natural and synthetic estrogens is being evaluated, and on whom new estrogens will be tried as they appear. It has not been feasible to apply the new techniques of vascular surgery to cerebral vessels, mainly because of the small size of certain intracranial vessels and the difficulty of maintaining flow without thrombosis. An original and imaginative approach to small vessel anastomosis in cerebral circulation now in progress seeks to create additional techniques or adapt some already devised for treating cerebrovascular disease.

Congenital heart disease

During the past year, congenital cardiac malformations were produced in rats by exposing their pregnant mothers to an atmosphere of 6 percent carbon dioxide during the period before visible growth from the primitive cell layers had begun. This is the first time that congenital heart lesions have been produced in this way and marks an important advance in understanding the causes of congenital heart disease and in having a way of producing these lesions for further investigations.

A marked improvement in conventional angiocardiography has been achieved by observing that this technique, used in conjunction with induced cardiac arrest, will now permit demonstration of the position and size of certain congenital defects not otherwise detectable. This new technique may complement or even supplant cardiac catheterization in the diagnosis of certain congenital cardiac lesions.

Surgery

A number of advances in heart surgery, as they have been used in arteriosclerosis, hypertension, and congenital heart disease have been described. Others, with more general application to cardiac disease should be noted here.

Improvement in methods of circulating the blood outside the human body continues to be made. The effects of coagulation factors and changes on the electroencephalograph have been emphasized on a continuing basis. It has been found that the irregular beating of the heart which occurs during hypothermia can usually be prevented by coronary perfusion with whole blood. This technique has been used on patients undergoing open heart surgery and the results have been very satisfactory. In animals, it has now been found possible to cut into the left ventricle of the heart for better exposure of certain structures with satisfactory healing of the incision. Several instances of life-saving kidney transplants into a uremic twin have been reported, and in one instance a human twin recipient has completed a successful pregnancy. Progress has been made in the development of an artificial lung which gives promise of greater efficiency than those in current use. Prototype models of artificial kidney and heart pumps for permanent implanting have been made and experimental use of these machines in dogs continue to yield promising results.

Epidemiology and geographic pathology

The study of man in his environment and of disease in human communities continues to be a principal phase of the Heart Institute research grants program. Quantitative methods have been developed for measuring the degree and location of arteriosclerotic lesions in their various stages of development and for collecting, preserving, and storing the specimens themselves. Work done in this country has given rise to similar studies in Puerto Rico, Colombia, Costa Rica, and Guatemala. Other foreign population groups studied from this

point of view, include various groups in Korea, Jamaica, Israel, Nigeria, Rome, and South Africa. In this country, a number of racial, occupational, and sociocultural groups in several widely scattered areas are currently being studied. Worth particular mention in this general field are: Completion of a study of a large kindred population in Michigan with a high frequency of hypercholesteremia and xanthomatosis, which throws new light on the mode of inheritance of serum cholesterol levels and reaffirms the association between hypercholesteremia and coronary disease; a large-scale study now in progress to evaluate the work performance of patients with cardiovascular disease; completion of the first 19 months of a 3- to 6-year pilot study to evaluate hospital-based home medical care services in the treatment of congestive heart failure; and an analysis of the distribution of trace metals in human beings as determined on autopsy material from adults dying of various causes in the United States, Switzerland, Nigeria, Belgian Congo, India, Japan, Thailand, Hong Kong, and Formosa. This project seeks to correlate cardiovascular renal disease with metal patterns in the kidney and heart.

TRAINING

Better teachers and improved methods of teaching have long been recognized as fundamental to a productive and meaningful approach to cardiovascular disease. Ten years' experience in the support of undergraduate and graduate training has in every way been a wise investment. One direct result is that today's physician is better trained than his predecessor of only a few years ago. Today's medical students are becoming more attracted to careers in medical research because of new opportunities for participating in the research activities of their schools. More comprehensive training in the clinical and public health aspects of cardiovascular disease is a direct result of the Heart Institute training programs. There are now 102 medical schools, schools of osteopathy, and schools of public health receiving support for the training of undergraduate students in research and scientific methods. The graduate training program has been expanded and it is anticipated that by the end of the current year there will be at least 180 training programs receiving support. This will represent an increase in the number of people being trained from 395 in 1958 to something over 600 in 1959.

Research fellowships

This program offers financial support to qualified scientists and promising students and is a vital part of the Heart Institute's total research effort. Stepped up as a result of this year's increased appropriations, the program anticipates the award of about 100 predoctoral fellowships. By the end of the current year, the Institute will have made about 175 postdoctoral fellowship awards. In addition, about 50 special fellowships were given to outstanding young men during the past year. Because of special programs in comparative cardiology, genetics, and drug development, the number of applications for special fellowships continues to show a substantial rise.

Conferences

Greater emphasis is being given to the support of scientific conferences both in this country and abroad. These conferences are extremely valuable for stimulating research and scientific activity, particularly where known gap areas exist. One example is the meeting in Rome this past fall of the International Committee on Blood Clotting Factors, made possible through a Heart Institute grant. Here were gathered experts from about 12 nations concerned with the numerous technical and practical problems arising from the clinical management of coagulation disorders. Another example of this kind of activity was the symposium held at the Heart Institute on the subject of epinephrine and its chemical relatives, including serotonin. While this general subject is by no means new, there has been a strong resurgence of interest because of the recent discovery that tranquilizers, important in the treatment of hypertension and mental illness, exert their effects through a mechanism which involves these substances.

These conferences can be measured in terms of tangible results, particularly with the subsequent publication of the conference proceedings. These have grown in volume and represent the contributions of many people engaged in research in a given field. As such they constitute a valuable compilation of current knowledge and experience for use by scientists everywhere.

HEART DISEASE CONTROL

The chief source of technical assistance to the States in matters pertaining to diseases of the cardiovascular system is the heart disease control program. During the past year the number of medical officers assigned to State and local health departments to develop new heart disease control activities rose to 22. These trained physicians, on loan assignments to State and local health departments, are engaged in developing, improving, and expanding community heart disease control programs. The application of knowledge to reduce rheumatic fever deaths and disability continued at a high level during the year. At least six new rheumatic fever prevention programs were begun during the past year in States and cities throughout the country. One interesting development was the experimental initiation in several States and communities of a fluorescent antibody technique developed by the Communicable Disease Center for rapid identification of "strep" infection. It is now hoped that the eventual eradication of rheumatic heart disease may be closer at hand if this technique can be perfected and its use made widespread. Progress in rheumatic fever control was made in other ways during the year. Of interest is the preparation of a rheumatic fever record guide for assisting States and localities to establish registers, simplify their records, and serve patients and the program more effectively.

In attempting to expand the already growing interest in the problem of cerebrovascular disease, the heart disease control program initiated a project with the Georgia State Health Department to establish a comprehensive "stroke" rehabilitation program on a statewide basis. It encompasses education, demonstration, research, and rehabilitation. The demonstration phase consists of a cerebrovascular facility at the Grady Memorial Hospital in Atlanta under the sponsorship of the Atlanta Health Department, Emory Medical School, Georgia Heart Association, and the Georgia State Department of Health.

In the area of congenital heart disease, the control program cooperated with the Chicago Heart Association in developing a tape recorder for the rapid screening of school populations to detect this disease by means of listening to abnormal heart murmurs on the recorder. Now developed, the recorder will be tested in a large field study during the coming year. Several program physicians working closely with health departments have been seeking to determine if a relationship exists between Asian flu—as well as other viruses—and congenital malformations of the heart. One large study in New York, stimulated by the control program, and supported by the National Heart Institute, is studying virus diseases in the etiology of congenital heart disease, using as a base the sera of women with Asian influenza.

Another project completed during the year involved the screening of a large population of school children in Colorado, comparing one-lead electrocardiograms, the X-ray, and physical examination as methods for early diagnosis of congenital heart disease. The results showed that the electrocardiogram and X-ray were inadequate for this purpose, when compared with a physical examination using the stethoscope.

CONCLUSION

The National Heart Institute completed its 10th year of existence during 1958—to be precise, on June 14. The advances made against heart disease since the Institute's birth in 1948 have been many and they have been quite remarkable—far beyond the expectations of the authorities in the field at that time. As members of this committee are aware, a number of the particular research accomplishments have been dramatic. They have stirred the hopes of our people. They include such noteworthy accomplishments as the development of the artificial heart and lungs for lifesaving surgery to correct heart defects, the use of natural and synthetic blood vessel grafts and prosthetic devices in operations for repair of congenital malformations and acquired heart damage, the means of prevention of rheumatic fever recurrences and subsequent rheumatic heart disease by treating the preceding streptococcal infection with antibiotics. These highlights have been paralleled by others less spectacular, less dramatic, but which today permit better recognition, improved methods of treatment and more intelligent management of those afflicted with heart and blood vessel disorders. They include the development of new diagnostic methods, new surgical techniques and new therapeutic agents and procedures. This progress in research has resulted in expanded clinical application and there have been considerable advances in basic knowledge in many areas. We now know a

great deal more about normal and abnormal functioning of bodily mechanisms and of processes inherent in the development of cardiovascular disease. Of course, much of what we know represents isolated bits and pieces of knowledge, yet these bits and pieces constitute the raw materials out of which will come the foundations for future progress.

I have mentioned some of these developments that have occurred during the past decade by way of expressing to this committee a large measure of gratitude for its support of the National Heart Institute programs. It is a truism to say that without the support of this committee, representing as it does the citizens of this Nation, our research effort into diseases of the cardiovascular system would still be in its infancy. We have a long way to go. But we have come a long way, too, thanks to the wisdom, the foresight, and the abiding interest of this committee.

PROGRESS IN FISCAL YEAR 1959

Dr. WATT. Mr. Chairman and members of the committee, the statement which you have before you here is one which summarizes a year of expansion and continued progress in the fields for which we are responsible. These fields are the cardiovascular diseases, diseases involving the heart and circulation.

This particular year's program in my opinion, has been exemplified by the development of our knowledge of a basic understanding of disease and our ability to capitalize in many respects on the basic studies that have gone on.

STUDIES ON NEW DRUGS

One illustration of this is in our own intramural research program, where a whole series of new drugs which affect blood pressure have been used in basic studies in further understanding of how these drugs work. This has been a cooperative arrangement, since most of these drugs have been developed by various pharmaceutical industries in the course of their own study and their own development; many of our own men in Bethesda and our grantees are working on a basic understanding of how these drugs work.

One particular example, very recently our laboratory has shown that in the use of certain of these drugs which interfere with the natural enzymes of the body, there is created a new set of forces where normal foods behave in quite different ways.

For example, a common amino acid, if given when these drugs are being used, will actually lead the patient to have the appearance of grogginess, almost of drunkenness. Here is a normal food stuff, part of our normal diet, which has a very abnormal effect on the particular patient using these new drugs.

This type of study, I think, is probably most exciting to the scientists, simply because it gives an insight in the ways that the body works. Such knowledge is a necessary first step towards rational treatment of disease.

In addition to that, we have gone on with our studies of arteriosclerosis.

Senator HILL. Excuse me, Doctor. Would you read the last sentence on your first page of your statement?

Dr. WATT (reading) :

If the results of preliminary studies are confirmed by more extensive clinical trials, these drugs should mark a major advance in the treatment of severe hypertension.

ATHEROSCLEROSIS RESEARCH

Atherosclerosis, the underlying cause of heart attacks and strokes, continues as the chief target of our research efforts. Here, the most promising area of research appears to lie in studying the handling of fatty substances in the body.

To further speed progress in this area, the development of a highly sensitive and reliable detection device for separating and identifying the components of fat mixtures was successfully undertaken this past year in the Heart Institute's laboratories at Bethesda, and, also, in a very realistic way in grant support as well.

We have had a series of groups working on this through a special committee of chemists who have been assisting us in further advance of this work. That has been one of the spectacular advances in the understanding of chemical analysis.

SURGERY FOR ANGINA

Many promising developments were reported during 1958 from the laboratories of institutions and individual investigators supported by Heart Institute research grants.

Among these advances was the description of a new surgical procedure to relieve patients suffering from severe intractable angina pectoris. While only a few such operations have been performed, the survival rate has been high and relief has varied from partial to complete.

New clues continue to be uncovered which may one day solve the mystery of hypertension. The relationship between psychological stress and hypertension in humans has been further elucidated, particularly regarding the prognosis of this disease.

A marked improvement in conventional angiocardiology has been achieved. This is a technique for visualizing the blood vessels by the injection of an opaque substance and the use of X-rays in doing this.

Using this technique in conjunction with induced cardiac arrest, it is now possible to demonstrate the position and size of certain congenital defects not otherwise detectable.

Senator HILL. In other words, you can find the weak place by this process?

Dr. WATT. Yes, sir. This has been expanded, Senator Hill, quite a bit by new techniques in using radioisotopes and things of this sort.

PREVALENCE OF HEART DISEASE

Heart disease continues as the leading cause of death, accounting for 54 percent of all deaths. Mortality in 1957 was 846,793, an increase over the previous year of about 33,000 and attributable to the influenza epidemic during the fall of 1957.

This is one of the serious problems, of course, for the chronically ill people when an acute disease sweeps the country. We did attempt, insofar as possible, however, to turn this serious liability into an asset by intensive study of this epidemic in many places with people especially skilled in the heart field, and we have learned a number of things along those lines which I think will lead us to better meeting this situation in the future.

GRADUATE TRAINING PROGRAM

The graduate training program has been expanded. By the end of the current year it is anticipated that at least 180 training programs will be receiving support.

I can now say that this was anticipated at the time this was written and is quite true. We have actively gone on with that since the time this was prepared.

About one hundred predoctoral fellowships will have been awarded together with 175 postdoctoral fellowships.

RHEUMATIC FEVER PREVENTION

The application of knowledge to reduce rheumatic fever continued at a high level during the year with the initiation of six new rheumatic fever prevention programs in States and cities throughout the country. The number of medical officers assigned to State and local health departments to develop new heart disease control activities rose to 22.

INTERNATIONAL HEART RESEARCH

Finally, the National Heart Institute shares in many activities of the National Institutes of Health in the international aspects of medical research.

For example, nearly 100 scientists from foreign countries have come to Heart Institute laboratories since the inception of the visiting scientist and guest worker programs. Many Institute scientists have studied abroad under the research fellowship program, and in our own training activities which we carry on within our own Institute.

This Institute has made more than 50 grants for research projects in other nations. About 13 countries have been represented thus far in the foreign grants area.

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$7,150,000 for the National Heart Institute. As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Now I would summarize this by saying that \$5,132,000 of the recommended increase will go for the support of research projects. That will be focused primarily on the areas of arteriosclerosis, hypertension, rheumatic heart disease, heart failure, and other cardiovascular categories.

In addition to that, in research fellowships there is an amount of \$500,000 recommended for the support of the extension of the research fellowship program. Our training activity would be expanded in the amount of \$727,000 over the amount requested in the budget of \$7,152,000.

Now for intramural research, the full amount requested was \$7,266,000 and an additional amount of \$531,000 was provided for heart research.

This is an increase of \$470,000 over the 1959 appropriation. The additional funds of \$531,000 provided by the House will be utilized for the development of instruments and methodology; studies of biogenesis and metabolism of amines; studies in radioisotopes; expansion of research in the aging process; and additional field studies in geographic pathology.

There will be an increase in the item of review and approval of grants. The full amount requested was \$790,000 and an additional amount of \$130,000 was added in connection with the grant program increases. This is an increase of \$166,000 over the 1959 appropriation.

In the item of professional and technical assistance, which is the activity in which we assign personnel to State and local health departments, there is an increase or an additional amount of \$125,000. This is an increase of \$170,000 over the 1959 appropriation.

Finally, there is an increase of \$5,000 provided for program direction needs and this is an increase of \$3,000 over the 1959 appropriation.

Senator HILL. Is this administrative increase in line with other increases which you need?

Dr. WATT. Yes, sir, this is in line.

Mr. Chairman, because of the overall budgetary considerations the Department has recommended that this increase over the President's budget be eliminated from the Senate's consideration of the budget.

Senator HILL. Have you had any research applications, applications for research grants fall through because of the lack of funds this year?

Dr. WATT. Yes, there were some not paid because of the lack of funds.

Senator HILL. Do you have any questions, sir?

Senator SMITH. No. No questions.

Senator HILL. Is there anything you gentlemen would like to add?

Dr. BURNEY. No, sir.

Dr. SHANNON. No, sir.

Senator HILL. Is there anything you would like to add, Dr. Watt?

PRIMATE RESEARCH CENTER

Dr. WATT. Last year you asked, in last year's report, that we undertake a study of the feasibility of some type of primate research center. I have a report which I can submit for the record, prepared by the National Heart Institute staff, after consultation with several advisory groups, particularly a subcommittee of the National Advisory Heart Council.

This report draws heavily on recommendations of these groups, but it is in fact, as we present it now, the recommendation of the staff of the Heart Institute.

(The report referred to follows:)

FEASIBILITY AND DESIRABILITY OF PRIMATE RESEARCH CENTERS

This is a staff report from the National Heart Institute submitted by request to the Appropriations Committee of the U.S. Senate. The report is based to a large extent upon advice from the National Advisory Heart Council and its committees which made a preliminary study of this matter.

Although some primate collections do exist and are being utilized for research purposes, no truly national primate research station or center has been established in this country. The National Advisory Heart Council expressed the need to look into the advisability and feasibility of providing a national facility, or facilities, for research on primates. Although the immediate concern of the Council and the subcommittee of the Council which looked into this matter intensively was in the field of cardiovascular research, it was recognized that such a primate research facility, or facilities, could cover the needs of each of the several fields of medical research.

A preliminary study was undertaken by the Heart Council to examine more closely the need for national facilities for research on primates in the cardiovascular field and to initiate steps that might be taken to achieve a solution to this problem. When the study began, attention was given to the alternatives of a single national primate research station¹ or of several national primate centers; consideration was given also to the question of whether a station or center should have only a cardiovascular orientation or should be a facility for research on primates more broadly conceived. Although it was obvious that any one of these alternatives was feasible, the Council decided that a preliminary study should be made in terms of a single national cardiovascular station planned in such a way that it could readily expand into a facility having the broader research functions and could lead to information and advice pertinent to either a single station or several centers.

The need for national primate research facilities should be viewed realistically against a background of other needs. The support of medical science in this country has evolved to the point of having satisfied to a very moderate degree the immediate and pressing requirements of investigators that could be met within their existing facilities. It is now important to look at the situation more broadly and to consider what facilities are needed that can be suitably shared by investigators in a manner and for purposes not provided within the scope of the usual research project.

There are several national resources important to the full development of medical science. Primate research centers represent one such resource. Another resource includes the more common variety of animal facilities that should be provided more adequately to individual investigators, facilities that vary from air-conditioned laboratories for mouse, rat, guinea pig, and rabbit colonies to breeding farms for larger animals, ranging from the dog to the sizable animals that have important research value. Still other needs are for centers that can provide facilities for special research developments such as biomathematical laboratories and special centers for the development of instrumentation. These would furnish needed mathematical and theoretical tools and improved apparatus for investigators studying the primates and lower animals, as well as man.

In favor of a single national station was the consideration that it could make available several species of primates in sufficient numbers within one facility for controlled comparative studies by permanent research staff in long-term investigations and by visiting scientists in short-term studies. Reasons opposing the establishment of a single large national primate research station relate to its geographic isolation from many parts of the country, with the possibility that its sheer size might tend to develop an undesirable degree of autonomy and function, independent of university and other appropriate local influences, and would call for reduplication of primary resources, such as a laboratory, instrument shop, etc., which might be available if it were more closely associated with a university.

Although smaller national primate research centers would have the disadvantage of not assembling in one place large groups of different species of primates for comparative studies, it is felt that such comparative evaluations could be secured if each of the four to six smaller national primate research centers selected one or more of the primate species (such as baboons, chimpanzees, or macaques) as its principal concern.

¹ In this report the word "station" means a single large national facility for research on various species of primates: the word "center" means one of several smaller facilities for research on a particular species of primate.

Also favoring the establishment of four to six smaller national primate research centers would be the ability to disperse them geographically so as to more effectively serve scientific needs, to associate themselves more intimately with the responsibilities of the sponsoring university or other institution, and with the opportunity to utilize facilities already at hand at the sponsoring institution so as to eliminate the need for duplication.

If a program of establishment of one or more national primate research centers be implemented, it is a recommendation of the National Advisory Heart Council that these centers be concerned primarily with the cardiovascular field and their activities extended as other fields of medical research required these resources.

Because such centers would be truly national resources, it is not considered advisable to require matching funds for the construction of the necessary animal headquarters. Rather, it would seem more appropriate to provide specific construction funds for this purpose. This, of course, would require legislative authority through which the necessary funds, either grant or contract, could be provided to selected institutions with an interest in this type of national resource activity. As noted above, this arrangement might first be exclusively that of the National Heart Institute, but subsequently, when the use of such resources was broadened, could be provided for under a general financial arrangement for the overall National Institutes of Health.

In terms of 1958 dollars, the initial capital outlay for a single large station would approximate almost \$10 million and the annual operating expenses of such a station would approximate \$3.5 million. Each of the smaller national primate research centers would require approximately \$2 million capital outlay and approximately \$700,000 for annual operating costs, including the procurement of the primates. Four to six smaller national centers are recommended.

In presenting the needs for these national primate research centers, the National Advisory Heart Council is not unmindful of the desirability of having the sponsored institution accept effective responsibility for the conduct of its center, for effective cooperation between the various centers which might be established, and for expeditious expansion of the research centers' contributions to the other medical research fields beyond that of the cardiovascular area. As already mentioned, the National Advisory Heart Council is also fully cognizant of the fact that there are other national needs, such as centers for biomathematical laboratories and special centers for the development of instrumentation, also important to all research advancement.

The objectives of a center should be:

- (1) The investigation of the normal cardiovascular structure and function, and of cardiovascular disorders of primates, naturally occurring or experimentally induced;
- (2) Studies related to these;
- (3) Providing scientific information on primates that might lead to a better understanding of cardiovascular health and disease in man; and
- (4) Gradual expansion of the research program to include other disease categories and other disciplines until, ultimately, the function of the station or centers is the full and complete investigation of the primate(s).

DEVELOPMENT OF DRUGS

Dr. SHANNON. I might say this report, which outlines certain potentialities, has not been studied as sufficiently as we would like in order to make firm recommendations at this time. I hope this can be done through the course of the next 6 to 8 months.

Senator HILL. As I recall, we have appropriated some \$2 million for the development of drugs?

Dr. WATT. Yes, sir.

Senator HILL. How did that program develop?

Dr. WATT. There are two areas involved and I have special reports which I will submit for the record on those two areas.

(The reports referred to follow:)

SPECIAL REPORT—CLINICAL RESEARCH IN ARTERIOSCLEROSIS

In the Senate report on the 1959 budget, it is directed that \$1,200,000 of the recommended increase in the 1959 appropriation for National Heart Institute extramural research be set aside for supporting clinical research in presently known drugs and hormones. Since the final 1959 appropriation represents a compromise between House and Senate allowances, and since the research interests outlined by the House and Senate Appropriations Committees overlap, it has been construed that work supported out of funds so designated must include studies of anticoagulants, the causes of atherosclerosis and of strokes, and research on heredity as a factor in heart disease, as stipulated in the House report; and that such studies necessarily include other areas of interest specified in the Senate report: namely, the action and utilization of anticoagulant drugs, basic mechanisms of blood clotting, the uses and limitations of present anticoagulants, studies of population groups to assess the effects of diet, heredity, weight, smoking, and stress on the development of atherosclerosis, and studies of the epidemiology of heart disease in different population groups.

Of the \$1,200,000 set aside for these various aspects of atherosclerosis research, all but about \$50,000 has been utilized. Competing applications for research grants in the above areas now pending consideration at the February meeting of the National Advisory Heart Council total over \$1,200,000. A major portion of these applications will probably receive favorable recommendations. The wealth of subject matter covered by grants receiving support from \$1,200,000 set aside for the programs enumerated above is so massive that only the highlights can be accented here.

CAUSES OF ATHEROSCLEROSIS AND STROKES

Diet

Experts now generally admit that diet plays a role in the development of atherosclerosis, but the controversy continues as to how great the role is and what dietary component or components are implicated. Controlled metabolic studies on hospital wards, in which oral formula feeding permits the entire fat intake to be derived from fats of previously defined composition, will provide qualitative and quantitative determination of the effects of various dietary nutrients on lipid metabolism and help to establish whether specific unsaturated fatty acids or perhaps certain trace substances present in these dietary fats favor the lowering of blood lipid levels. Oddly enough olive oil, which has an extremely low content of linoleic acid, the unsaturated fatty acid which some consider specific for lowering blood lipid levels, has also been observed to cause marked depression of serum cholesterol; and a special study is underway to compare the effects of olive oil and butter in natural mixed diets on the serum cholesterol levels of male students. The fatty acid content of cow's milk will be altered by dietary means and the effects of various types of butterfat will be observed in clinical nutritional studies.

It has recently been shown that a high protein diet reduces the atherogenic potential of cholesterol diets in animals, while a low protein component has the reverse effect; and the value of different individual proteins as well as of their constituent amino acids will be determined. Other dietary factors to receive consideration are the quality or degree of rancidity of identical fats; the influence of individual vitamins and minerals; the synergistic effect of a high vitamin plus high protein supplement; and the effect of various combined hormonal and dietary regimens. For example, the combination of estrogen, insulin, and a low protein diet produces in animals extensive ulcerative and hemorrhagic atherosclerosis of the aorta, yet the coronaries are completely protected, probably by the estrogens. How can such observations be applied to human coronary disease, and to the particular susceptibility of insulin-treated diabetics?

The question of whether a large fat meal increases the tendency of the blood toward coagulation has not been satisfactorily answered. A survey of patients following their first coronary attack will attempt to relate, by questioning the immediate family, the meal immediately preceding the attack to the incidence of such attacks. On the other hand, in a large group of patients with or without hypercholesteremia or thrombotic disease, the effect of the feeding of fatty meals on the various coagulation factors of the blood is under study.

Under support are many projects on the synthesis, absorption, transport, distribution, excretion, and biochemical transformations of cholesterol and other

lipids in humans, now that newer techniques are becoming available that allow human studies to supersede the confusing and frequently conflicting findings in the lower animals. Support is given to develop, modify, extend, and assess the various physicochemical technics for defining the biologic interrelationships of lipoproteins and the various detection devices which may be employed for the separation of specific naturally occurring fatty acids by gas liquid chromatographic technics; for it is only by further improvement of analytic technics that certain aspects of human biosynthesis of lipids can be further elucidated.

Stress

The relationship of stress and strain to heart disease has been described as one of the most troublesome and difficult problems of our time, not only from a medical and public health but from an industrial and legal point of view as well. As for the public health aspects of the problem, support has been given to a study of the work experience of persons with coronary artery disease with a view to determining the effect of stress-producing occupations on the precipitation of new or additional cardiac episodes.

From the physiologic point of view, emotional stresses and conditioned reflexes which influence hormonal and nervous system regulation of blood pressure, cardiac dynamics, lipid metabolism, are most precisely pursued at present in animal studies under controlled conditions; the effects on atherogenesis of cold, dark, enforced physical activity, derangement of the pecking order, and other forces are being examined in chickens. However, humans, both normals and patients with coronary diseases or hypertension, are the subjects of studies on coronary circulation patterns and hemodynamic changes under such stress mechanisms as exercise, oxygen lack, nitroglycerin, vasopressors, surgical manipulation, anesthesia, trauma, hemorrhagic and other types of shock, bacterial toxins, emotional stimuli.

By newer technics, such as nitrous oxide breathing, transcortical circulation time using radioactive tracers, chemical analysis of coronary blood samples, and direct microscopic visualization of flowing blood in living humans during surgery, which permit observations not previously possible, striking differences in the reactivity of diseased as compared with normal coronary circulation are being demonstrated. Using a specially developed refrigeration apparatus capable of rapidly cooling room air during its passage through a closed circuit system, an investigator is determining the physiologic responses that occur in normals and cardinals on exposure to subfreezing air, vital knowledge in a country where it has been estimated at least 95 percent of the population is exposed for some part of each year to freezing air temperatures. With a newly constructed analyzing system made possible by recent developments in vibration transducers, a researcher is making permanent reproducible recordings of the heart-sound spectrum in normals and in coronary patients under such stressful conditions as anoxia, injury, high altitude, and unusual gravitational pull.

Heredity

Research in human genetics has lagged for two obvious reasons: breeding experiments, the cornerstone of genetic studies, are impossible on human beings; and trained medical geneticists are at a premium. The pedigree method is a kind of crutch on which medical genetic studies have had to lean. Observations on genetic factors in cardiovascular disease are few and scattered. From the earmarked funds, support has been possible for a few worthy projects in human genetics:

Underway is a comparison of familial hyperlipemia and essential familial hypercholesteremia as secondary factors in atherosclerosis. The investigator has accumulated in his clinic a number of patients with the former condition, and is also utilizing a large kindred in his state who are offspring of a mating between homozygous familial hypercholesteremia and homozygous familial hyperlipemia, and will tests the hypothesis that hyperlipemia, in contradistinction to hypercholesteremia, is of little significance in the development of atherosclerosis. Another investigator will define the mode of inheritance and factors affecting penetrance and expressivity in patients with coronary disease, atherosclerosis in general, including nondiabetic members of diabetic families, essential hypertension, rheumatic fever, various congenital abnormalities, glycogen disease of the heart, muscular dystrophies affecting the heart muscle familial cardiomegaly, Buerger's diseases, the Werner syndrome of premature aging, cystic disease of the kidney, the hypertension-producing tumor pheochromo-

cytoma, and monogolism. In a study in which the total population of 8,300 persons of a modern U.S. city is being examined, one of the objectives is to determine the existence of families with unusual prevalence of cardiovascular diseases, with the hope of establishing a baseline for future studies on genetic factors. In a survey of the precursors of coronary disease and hypertension in a large student body, the genetic background has been included, and statistical analysis now underway may yield significant conclusions.

Causes of strokes

In progress is a multidisciplinary study of the natural history of cerebral thrombosis by a retrospective analysis of hospital case histories from different types of hospitals of a large number of patients over a 10-year period. Clinical factors affecting morbidity and mortality from this disease will be investigated. A followup study on surviving patients who are on no specific therapy will be undertaken in order to widen the scope of life tables already begun. Also, the clinical usefulness of a new radioisotope tracer method for studying cerebral hemodynamics will be evaluated in patients with cerebrovascular disease and in normal subjects. There is still much to be learned about the cerebral blood circulation, and there has been no easily applied technic for determining cerebral pulse waves and other hemodynamic factors in intact humans. In a novel approach to physiologic and pharmacologic study of the cerebral circulation in intact human subjects, the orbital cavity is enclosed in a rigid wall in which a pressure transducer is incorporated. Simultaneous determinations of cerebral blood flow and metabolism and cardiac output in health and disease are being supported elsewhere, as well as critical evaluation of methods of treating cerebrovascular disease.

Other studies of etiologic factors in atherosclerosis

A clinicopathologic study of coronary disease in which a large new series of hearts is being compared with a 10-year series completed in 1947 is of major importance in view of current concepts that coronary arteriosclerosis is changing in frequency or extent, and in view of changes in treatment, attitudes toward bed rest and activity, and the long-term results of anticoagulant treatment. Efforts are also directed toward integrating in parallel animal experiments the various coexisting factors that may reinforce or counterbalance each other in cholesterol-induced coronary, cerebral, and peripheral arteriosclerosis—factors of age, of estrogenic and other hormonal levels, of hypertension, under- or over-nutrition, individual dietary compounds. Attempts are in progress to determine the elements that are responsible for stimulating natural revascularization in vascular beds after injury and occlusion; to study the coronary flow and myocardial oxygen consumption in the normal and diseased human heart in situ; to learn the extent to which the mechanical heart-lung may contribute to the surgical treatment of arteriosclerotic heart disease.

One of the most pressing problems in cardiovascular disease will be to assess supposedly normal individuals who are candidates for coronary disease or cerebrovascular disease. Various sign posts for coronary disease have been set into a mathematical formula whereby it is possible to obtain two distinct groups, those in whom preselection for being a candidate for coronary disease is 90 to 95 percent accurate and those in whom preselection against being a candidate is 93 to 97 percent accurate. By comparing these two groups with those who have experienced coronary disease, it may be possible to find even more direct clues as to who the candidates will be.

Epidemiology of heart disease

A large number of studies on atherosclerosis in various population groups in the United States and abroad were initiated prior to July 1958.¹ Since these are long-term studies, requiring years of accumulation of data for statistical significance, it might be considered fortunate that it has been necessary to use 1959 earmarked funds for only a small number of such projects, some of which had already been under Heart Institute support but were now competing for additional funds.

Included is a long-term study of the epidemiology of hypertension and arteriosclerotic disease in various industrial-occupational groups of the Chicago living population, which combines the epidemiologic, clinicopathologic, and ani-

¹For a detailed account of these studies, see the monograph, "Diet, Hormones, and Atherosclerosis: A Review of Research Grants Supported by the National Heart Institute, Fiscal Years 1949-58," pp. 6-14.

mal experimental approach; the previously mentioned survey of the total population of a small northern U.S. city, a population already analyzed by kindreds and households; a study of the type and incidence of death from coronary disease in Rochester, Minn.; and a study of cardiovascular disease in ethnic groups in South Carolina, where the large Negro population is perhaps as homogeneous a strain and as static as in any region of the United States, and where there is a startling discrepancy between the incidence of coronary as compared with cerebral artery disease in the Negro as compared with the white, coronary thrombosis being two to four times as frequent in whites as in Negroes, cerebral artery disease twice as frequent in Negroes as in whites.

Anticoagulants and basic mechanisms of blood clotting

Despite the highly favorable influence of anticoagulant therapy in reducing the death rate from acute myocardial infarction and the rate of thromboembolic complications, failures occur in the form of repetition of thrombotic episodes or of hemorrhagic phenomena. An attempt is in progress to correlate the failures of anticoagulant therapy with alteration of specific coagulation factors; a battery of established tests is performed in all patients, and new technics are being devised.

An effort is also being made to improve the diagnosis of local intravascular clotting in patients showing a strong thrombotic tendency. Some patients with coronary disease appear to experience alternate periods of hyper- and hypo-coagulability, and a study to elucidate the mechanism of this phenomenon is in progress. Special studies are examining the mechanism of heparin on the clotting process.

Evidence concerning the importance of various phospholipids in the coagulation mechanism is increasing steadily: some appear to be essential for thrombin formation, others closely related structurally may act as inhibitors; yet both types may be present in plasma at all times and their actual levels may be regulated by specific enzyme systems. The effects of various types of phospholipids and related substances on different phases of the blood coagulation mechanism are under study. A contribution to the understanding of the coagulation process in health and disease will certainly develop from a study of the fate of concentrated extracts of human clotting factors given intravenously to patients with various clotting disorders, including Dicumarol intoxication.

An ingenious and interesting model for thrombus formation in vitro, employing a turntable, permits thrombus to develop in a moving column of blood, thus resembling in many respects an in vivo thrombus. This device will be used to study cellular, chemical and hemodynamic variables in the production of thrombi, and to test drugs and chemicals potentially able to prevent thrombosis or to lyse thrombi already formed. The technic, which is simple, fast, and cheap, will be standardized as a clinical method for testing the susceptibility of patients to thrombosis. Elsewhere, microcinematography will be used to record changes occurring in small blood vessels during thromboembolic crises.

The increasingly popular theory that failure to dissolve the small clots constantly forming normally in blood vessels during life is more important in the genesis of atherosclerosis than overfunction of the coagulation mechanism is under exploration at a number of centers.

Clinical research in presently known drugs

Long-term estrogen therapy in women with myocardial infarction is being continued, using small doses which, it is hoped, will have an anticholesteremic effect without causing uterine bleeding; and clinical results are correlated with urinary excretion studies of the steroids, in matched series with untreated patients. Long-term estrogen therapy has also been underway now for 3½ years in a large series of male coronary patients under 50 years of age; the death ratio has been 3 to 1 in favor of the treated as compared with the untreated control group, but an additional 2 years of observation will be necessary for statistically significant results. The evaluation of untreated controls in such studies yields valuable data on the natural history of myocardial infarction.

An ingenious attempt to determine the mechanism of action whereby estrogen may protect against atherosclerosis, and to ascertain whether it is perhaps concentrated in human atherosclerotic plaques is underway. Tagged microcrystals of estrogen, previously shown to be well tolerated by humans and to prevent the development of experimental atherosclerosis in cholesterol-fed rab-

bits, are given intravenously to dying patients. Their rate of disappearance from the blood stream is observed and their distribution in plaques and in other tissues is studied at postmortem by radioautographs and chemical extraction.

The prolonged administration of cortisones and corticotropin (ACTH) has been shown to produce abnormally high serum cholesterol levels; the combined administration of these hormones and cholesterol to rabbits results in enhanced elevation of all lipid fractions, yet these animals exhibit less atherosclerosis than those treated with cholesterol alone, perhaps because tissue permeability is decreased by the hormone. The influence of corticosteroid preparations on circulating lipids and the role of tissue permeability in atherogenesis are receiving further study.

Further work on the potentialities of anticholesteremic agents for preventing or reversing atherosclerotic deposits is receiving support. The conflicting reports that have appeared on the effectiveness of sitosterol in lowering blood cholesterol levels may be attributed at least in part to variations in composition of the preparations used. Now a pure beta sitosterol has been prepared, a radioactive form is being synthesized, and its absorption and fate in man will be compared with cholesterol, to which it bears a close structural similarity.

It has recently been shown that large amounts of nicotinic acid given to patients with hypercholesteremia of various origins can rapidly revert cholesterol levels to normal. Oddly enough, the derivative nicotinamide has no such effect. The mechanism of this phenomenon will be examined by studying the urinary excretion pattern following the administration of both substances. Elsewhere, the results of nicotinic acid administration will be evaluated in patients with vascular occlusive disease and hypercholesteremia to ascertain whether regression or at least arrest of progress in their disease parallels the depression of blood cholesterol levels.

Further insight into the mechanism and proper therapy of cardiogenic shock will be gained from a study in which the hemodynamic effects of measures currently utilized in its treatment—vasoconstrictors, cardiac glycosides, adrenal steroids—are being assessed. Since cardiogenic shock occurs and may cause death in patients with myocardial infarction of relatively mild degree, data obtained from such a study may play a significant role in reducing the mortality rate of a group of patients who otherwise might have a life expectancy of several years.

SPECIAL REPORT—DEVELOPMENT OF NEW CARDIOVASCULAR DRUGS

In the Senate report on the 1959 budget, it is stipulated that \$2 million of the recommended increase in the 1959 appropriation for National Heart Institute extramural research be set aside for developing new drugs, including new anticoagulants, nonfeminizing hormones for treating arteriosclerotic disease, and new agents for lowering blood pressure. The House committee also expressed a special interest in the discovery of new cardiovascular drugs. Because of the small number of applications in this area received by the Heart Institute and recommended for approval by the Study Sections and by the National Advisory Heart Council, only about \$370,000 of this earmarked money has been utilized. On the basis of applications currently pending the February meeting of the Heart Council, there is a possibility that up to an additional \$450,000 may be favorably recommended for new drug research.

The inability to use the full amount designated for this purpose is to be attributed in large part to the fact that facilities for large-scale screening of new pharmacologic agents are not generally available at private institutions. The major strides in drug discoveries of the past few years—most dramatically exemplified by new antibiotic agents and adrenal cortex hormones—have been made within commercial pharmaceutical houses; and probably isolation, purification, and synthesis of cardiovascular medicinals will progress with desirable rapidity only by wholehearted collaboration between industry and the academic and clinical investigator.

AREAS OF PROMISE IN ARTERIOSCLEROSIS

One of the most promising areas of present support for new pharmaceutical agents in arteriosclerotic and thrombotic disease lies in the development of plasmin, plasminogen, and streptokinase preparations of sufficient purity to render them suitable for use in coronary and cerebrovascular thrombosis, and in the clinical application of such preparations. Assuming increasing importance in the therapy of thrombotic disease is an approach which seeks to enhance the

body's blood-lysing mechanism, the counterpart of the anticoagulant approach, which is directed at inhibiting the blood-clotting mechanism. Much evidence is accumulating to the effect that a state of equilibrium between intravascular thrombosis and lysis normally exists in the body and that in thrombotic disease, the clot dissolving or lytic portion of the balance is deficient. The possibility exists that formation within the body of the proteolytic enzyme plasmin from its precursor plasminogen—which must be activated by still another enzyme, such as streptokinase—is depressed after a fatty meal. The blood-lysing mechanism may also be disturbed from other causes. Should plasmin and related preparations come into wide clinical use—as they may—it will be necessary to have available also supplies of the antagonistic enzyme antiplasmin for those patients in whom the administration of plasmin may get out of hand; the isolation of antiplasmin in quantities is receiving support.

The relative immunity of premenopausal females to coronary disease, which has led to important discoveries concerning the potential protective effects of estrogens against this disorder, has a counterpart in the relative immunity of normal female dogs or estrogen-treated female castrate dogs to the toxic effects of digitalis; this interesting phenomenon is now the basis of a promising laboratory technique for screening various new estrogen-like compounds by their protective effect against toxic doses of digitalis. Another large-scale long-term clinical study embodies a search for estrogen analogs with decreased estrogenicity but with maintained lipid-shifting properties for clinical trials on patients with cerebral thrombosis.

An intriguing approach to the problem of atherosclerosis is based on the recent discovery of a factor essential to the synthesis of cholesterol by the tissues: the preparation of this new factor in large quantities and in a pure state combined with a search for antimetabolites which will inhibit the factor and so interfere with cholesterol biosynthesis may lead to an important breakthrough in therapy.

HYPOTENSIVE DRUGS

Considerable activity has been stimulated in the search for better hypotensive drugs. Notable is an attempt to isolate and identify an active hypotensive principle which is present in renal extracts and which, if it can be identified and synthesized, may ultimately provide for clinical application a specific antihypertensive medicinal. Meanwhile, additional efforts are being supported to extract potent hypotensive alkaloids from the bark of certain trees and herbs, to characterize them, elucidate their structure, and evaluate their hypotensive properties; to screen large numbers of synthetic and natural products, particularly centrally acting ones, by open-chest cross-circulation techniques in animals; to synthesize new agents, related structurally to reserpine, but with more rapid, or more reliable effects or with less toxicity; and to exploit new chemical nuclei for their potential hypotensive effect. A novel strategy in the attack upon hypertension is founded on an original observation that hypertension is uncommon in patients with liver cirrhosis and that hypertensive patients tend to become normotensive if they develop cirrhosis; it may be possible to isolate from the blood of such individuals an enzyme which destroys the naturally occurring hypertensive agent angiotensin.

RESEARCH ON OTHER COMPOUNDS

Although drugs used to treat congestive heart failure are among the oldest known to therapeutics, digitalis and related cardiac glycosides are far from ideal drugs. Further research is receiving support to unearth new preparations which will exhibit similar tonic effects upon heart muscle, but which will have a wider margin between effective and toxic doses, so that undesirable disturbances in cardiac rhythm can be avoided. Among the substances now being examined for this purpose are certain chlorophyll derivatives, a series of conjugated carbonyl compounds, alkaloids of the erythrophleum series, and certain simple steroid-containing molecules. New drugs are also being sought for treating cardiac arrhythmias, particularly atrial fibrillation, for which quinidine, the classic remedy, is unsatisfactory because only about 50 percent of patients respond to it and because it is toxic. A search is also in progress for agents that will prolong the safe period of induced cardiac arrest at surgery now fixed at about 30 minutes, to render possible the repair of more complicated cardiac defects. Under examination is a series of compounds with tissue-fibrosing activity for use in vascular anerysms and for the control of scar tissue formation.

Of unusual interest is the juvenile hormone, which acts as a kind of fountain of youth in insects, permitting growth but preventing metamorphosis. Previously isolated only from the male *Cecropia* (silkworm) moths, this remarkable substance has recently been extracted from males and females of more than 20 species of butterflies, from beetles and flies, from earthworms, crustaceans, and other invertebrates, and most amazingly, from vertebrates. In what is probably the first instance of a vertebrate extract with a specific morphogenetic effect upon an invertebrate, extracts of beef adrenal cortex have been obtained which prevent metamorphosis in the silkworm, mimicking in detail the action of juvenile hormone of insects. So far as is known, this is the only substance which prevents aging and maturation of any animal; and the discovery of the role of this substance in animals other than insects may have far-reaching consequences.

TECHNICAL DEVELOPMENTS

Perhaps as important as actual synthesis, isolation, structural definition, and testing of new compounds are devices for simplifying these procedures. A lightweight transistorized small animal and electrocardiographic telemeter, which permits the hearing and visualization of muscle action currents when attached to free running animals in their natural environment, may be used to test the action of drugs upon the heart. The first volumes of an extensive annotated bibliography of the world literature on cardiovascular compounds are now in press, with publication expected this spring. This Heart Institute-stimulated project was made possible by funds from the earmarked appropriation. A rapid and easy method of screening materials for their effect upon the microcirculation consists of stripping the horny layer of the skin from a small area of the forearm and observing the effect of orally, locally, or systemically administered drugs upon the capillaries by means of binocular stereoscopic microscope. This method is now being applied for evaluation of various types of compounds.

These are some of the more salient features of activities made possible by the money designated for use in new drug development. Time for eliciting grant requests along these lines and for encouraging collaboration between industry and scientific centers is necessary for further stimulation of such activity.

CLINICAL STUDIES

Dr. WATT. Actually, the one related to the clinical studies has gone quite well, and we actually achieved more than the amount that was indicated.

In the drug development area, this has been somewhat slower, although I think that considering the time allowed it has gone quite well.

The problem essentially is this: In the development of drugs in the industrial area there is a tremendous investment and a great deal of activity going on now. I believe Dr. Shannon had a report from industry indicating that somewhere between 6,000 and 7,000 drugs in this past year, were being developed, which had some promise and activity.

This is an area where there is not only a major investment but already a major planned program of development.

The problem we felt we had to face then was not so much a question of attempting to expand in a way that would duplicate or otherwise change the active going program but to find out where there might be bottlenecks in the process. In such an area our assistance would speed up the process from synthesis to the actual end use for patients.

And many of the time factors involved are not ones that are amenable to speeding up. A major problem of testing a new drug, is determination of toxicity and such things. This is supervised by the Food and Drug Administration and demands careful, long-term

studies before a drug can actually be used in the treatment of these chronic diseases.

However, there are aspects which can be shortened in time by such simple matters as expanding the number of patients that can be considered at one time.

SHORTAGE OF TRAINED PERSONNEL

In our discussion with members of industry and in a number of other areas, it became quite apparent that one of the shortage areas was in the number of people who have had the training in modern large-scale studies of drugs once they have reached the phase of clinical trial.

It is to this aspect that we have devoted a great deal of our attention in the last few months. It got one further push forward on Saturday when the National Advisory Heart Council, in a special meeting for other things, did consider some new applications which have come to speed up this process in the medical schools.

They did recommend favorably going ahead with those programs as they had been submitted.

Our progress is somewhat less than the full goal of the program as set out last year, but I think we can say what has been done is a good foundation for further development.

COMPETITION FOR PERSONNEL

Dr. SHANNON. Senator Hill, this is an example of a program, taken together with psychopharmacology and cancer chemotherapy, where you have this competition of three large programs for precisely the same type of personnel and the programs that Dr. Watt is discussing now parallel the programs that were started 2 years ago by the cancer chemotherapy group, also being undertaken by the mental health group to train what are called clinical pharmacologists to approach the evaluation of drug action in a patient or in groups of patients with as much precision and speed and dispatch as it is now possible to do.

This is a very serious deficiency and is holding back all three of these programs really.

Senator HILL. Today.

Dr. SHANNON. Yes, sir. This is a primary problem.

Senator HILL. Are there any questions, Senator?

FACTORS IN CHANGE IN MORTALITY RATE

Senator SMITH. Yes, Mr. Chairman.

Dr. Watt, you referred to mortality figures in 1957 in your statement.

Is there any change in the death rate by age groups from these diseases?

Dr. WATT. When you look at the overall picture, Senator Smith, there has not been too great a change. I think there is one of major importance and it is really the result of much of the work that has been supported here. There has been a definite decrease in deaths from hypertension. This is, I am sure, the result of the prolongation of life of those individuals with high blood pressure. A few years

ago, in the absence of these drugs, we would have had nothing to give them except bed rest. Now it is possible, with the use of these drugs—and there are quite a number now in active clinical work—to cause a definite prolongation, not only just of life but of healthy life of a very high percentage of those people who do suffer from high blood pressure.

So that there has been, to some extent, a shift. Obviously, if there are people who have the disease and who are given treatment that leads to 5 or 10 years' longer life, then there would be a shift.

PROGRESS IN RHEUMATIC HEART DISEASE

The other areas where I think there has been the greatest amount of, shall we say, lifesaving effect of these programs, or life-prolonging effect, is in the field of rheumatic heart disease where the preventive programs are really getting to the point of eliminating damage to the heart by the prevention of recurrent attacks of streptococcal disease. There is no question there that this group, too, has been put into the population as a healthy group and therefore would not appear in the mortality tables in the younger age groups that it used to affect.

CONGENITAL HEART DISEASE

Then, the third, which gets, of course, to the youngest group of all, is in the congenitally damaged heart area where surgery today is making possible a type of repair which was just inconceivable 5 years ago.

I remember when I came on this job 6 years ago—the type of surgery which is now commonplace in the major centers was not even thought of as a possibility.

Dr. SHANNON. All of these cause a shift of the life span in these people with cardiovascular diseases, but it would take a number of years before this trend becomes clear.

We can see it in specific age groups, but it has not had a very profound effect in life tables.

Dr. WATT. Another factor is that arteriosclerosis and hypertension are interrelated. This is some type of interrelationship between these two conditions. A patient may be saved from the consequences of a severe hypertension, which in itself may be lethal. He has not been protected from any underlying disease process that may be going on.

If such an underlying process is one which affects the heart and blood vessels, then it would appear later in the mortality tables of heart disease or in morbidity tables such as would be obtained from examinations of the National Health Survey, as one or another form of heart disease. Thus you might see an overall figure changing very little, but there is a material change in the life expectancy of individuals.

AGE AND HEART DISEASE MORTALITY

Senator SMITH. I have been hearing about heart attacks and consequent deaths of people from 45 to 50. A common expression or statement is "Oh, yes, it is taking them much younger than in previous years."

That was the reason for my question. I wondered if these cases were more publicized perhaps or closer to us as we get older, or just what the answer is?

Dr. WATT. Actually, the general trend of the heart disease death rate in middle life has been downward, Senator Smith. The problem here, of course, is that these dramatic cases of sudden death in the young adult group is really the big problem of our time. Sudden death is an exceedingly difficult problem to a great extent because we are unable to obtain a medical history from the patient. Quite commonly these deaths are thought of as accidents, and in one sense they are. An artery may be blocked by a clot which, if placed slightly differently within that artery, would not have resulted in a blocking of that blood vessel and thus would not have lead to death of the tissue. Or perhaps a collateral branch of the artery exists and thus even if the main artery is blocked, there would not be a sudden cutting off of the blood supply, thus a sudden, almost accidental death.

Senator SMITH. This can be very encouraging to the younger men between 45 and 50.

Senator HILL. We want to thank you for this splendid statement. We appreciate it very much.

We will stand in recess until 2 o'clock.

(Whereupon, at 12:30 p.m., the committee recessed, to reconvene at 2 p.m., the same day.)

AFTERNOON SESSION (WEDNESDAY, MAY 6, 1959)

Senator HILL. The committee will kindly come to order.

Dr. Knutson, we are very happy to have you here, sir. And we will be glad now to have you proceed in your own way.

DENTAL HEALTH ACTIVITIES

STATEMENTS OF DR. JOHN W. KNUTSON, CHIEF DENTAL OFFICER, PUBLIC HEALTH SERVICE; DR. FRANCIS A. ARNOLD, JR., DIRECTOR, NATIONAL INSTITUTE OF DENTAL RESEARCH; DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“For expenses not otherwise provided for, necessary to enable the Surgeon General to carry out the purposes of the Act with respect to dental diseases and conditions, \$7,420,000.”

Amounts available for obligation

	1959 appro- priation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$7, 420, 000	\$7, 420, 000	\$9, 725, 000
Deduction—unobligated balance, reserve for savings.....	—2, 000	0	0
Total obligations.....	7, 418, 000	7, 420, 000	9, 725, 000

Obligations by activities

Description	1959 appropriation		1960 budget estimates		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Grants:						
(a) Research projects.....		\$3, 427, 000		\$3, 444, 000		\$4, 476, 000
(b) Research fellowships.....		423, 000		423, 000		500, 000
(c) Training.....		650, 000		650, 000		1, 000, 000
2. Direct operations:						
(a) Research.....	111	1, 396, 000	111	1, 377, 000	123	1, 521, 000
(b) Review and approval of grants.....	11	133, 000	11	137, 000	15	180, 000
(c) Professional and technical assistance.....	91	983, 000	91	983, 000	103	1, 190, 000
(d) Coordination and development of dental resources.....	30	320, 000	30	320, 000	54	772, 000
(e) Administration.....	10	86, 000	10	86, 000	10	86, 000
Total obligations.....	253	7, 418, 000	253	7, 420, 000	305	9, 725, 000

Obligations by objects

Object classification	1959 approp- riation	1960 budget estimate	1960 House allowance
Total number of permanent positions.....	253	253	305
Full-time equivalent of all other positions.....	38	38	79
Average number of all employees.....	276	276	360
Number of employees at end of year.....	336	336	430
01 Personal services.....	\$1, 953, 700	\$1, 953, 700	\$2, 409, 700
02 Travel.....	117, 200	117, 200	172, 400
03 Transportation of things.....	14, 200	14, 200	25, 500
04 Communication services.....	11, 000	11, 000	13, 200
05 Rents and utility services.....	7, 200	7, 200	7, 700
06 Printing and reproduction.....	16, 500	16, 500	30, 500
07 Other contractual services.....	107, 900	107, 900	163, 800
Reimbursement to "National Institutes of Health management fund, Public Health Service".....	531, 000	514, 000	545, 000
08 Supplies and materials.....	67, 500	69, 500	90, 700
09 Equipment.....	29, 900	29, 900	208, 000
11 Grants, subsidies, and contributions.....	4, 490, 000	4, 507, 000	5, 966, 000
Contribution to retirement fund.....	65, 800	65, 800	80, 600
15 Taxes and assessments.....	12, 200	12, 200	18, 000
Subtotal.....	7, 424, 100	7, 426, 100	9, 731, 100
Deduct quarters and subsistence charges.....	6, 100	6, 100	6, 100
Total obligations.....	7, 418, 000	7, 420, 000	9, 725, 000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	253	\$7, 420, 000
Deduct unobligated balance, reserve for savings.....		2, 000
1960 base.....	253	7, 418, 000
1960 appropriation request.....	253	7, 420, 000
Net change requested.....	0	+2, 000

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Decreases:				
Reduction in other personal services to offset cost of extra day of pay-----		\$4, 053		\$4, 053
Net change in reimbursement to National Institutes of Health management fund for centrally furnished services-----		17, 000		
Subtotal decreases-----		21, 053		4, 053
Increases:				
For mandatory items: Extra day's pay (261 days in 1959 and 262 days in 1960)-----		4, 053		4, 053
For program items:				
Increase in research projects in areas such as peri-odontal disease, cleft palate, aging, etc.-----		17, 000		1, 049, 000
Increase in fellowships to support dental part-time fellowships program-----				77, 000
Increase in training grants to meet the need for teachers and researchers in the basic science areas-----				350, 000
Direct research in germ-free-----		2, 000	6	62, 000
Direct research on nutritional studies-----			3	36, 000
Direct research in epidemiology-----			3	30, 000
Increase in review and approval functions-----			4	30, 000
Professional and technical assistance study on home fluoridation-----			8	155, 000
Professional and technical assistance educational program on productivity of dentists-----			4	52, 000
Coordination and development program on training methods for auxiliary personnel-----				290, 000
Coordination and development research in prepayment of dental care-----			24	162, 000
Net change in reimbursement to National Institutes of Health management fund-----				14, 000
Subtotal, program increases-----	0	19, 000	52	2, 307, 000
Total change requested-----	0	+2, 000	52	2, 307, 000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$2,305,000 for "Dental health activities." As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Activity No. 1(a)—Research projects

The full amount requested of \$3,444,000 was allowed by the House, and in addition it provided an increase of \$1,032,000. This increase will be used to support research projects in the areas of aging, periodontal disease, cleft palate, and other congenital anomalies and dental caries. This is an increase of \$1,049,000 over the 1959 appropriation.

Activity No. 1(b)—Research fellowships

The full amount requested of \$423,000 was allowed by the House, and in addition it provided an increase of \$77,000. This increase will be used primarily to allow for additional and much-needed support for the dental student part-time fellowship program.

Activity No. 1(c)—Training

The full amount requested of \$650,000 was allowed by the House, and in addition it provided an increase of \$350,000. This increase will be used for expansion of the training program to serve the needs in our dental schools for well-qualified teachers and research workers in both clinical and basic science fields.

Activity No. 2(a)—Research

The full amount requested of \$1,377,000 and 111 positions was allowed by the House, and in addition it provided an increase of \$144,000 and 12 positions. This increase will be used (1) to support expanded germ-free studies; (2) to expand nutritional studies as related to the evaluation of food supplementation with mineral phosphates; and (3) to expand field studies on the epidemiology of oral disease. This is an increase of \$125,000 over the 1959 appropriation.

Activity No. 2(b)—Review and approval of grants

The full amount requested of \$137,000 and 11 positions was allowed by the House, and in addition it provided an increase of 4 positions and \$43,000 to be used to service the expanded grants programs. This is an increase of \$47,000 over the 1959 appropriation.

Activity No. 2(c)—Professional and technical assistance

The full amount requested of \$983,000 and 91 positions was allowed by the House and in addition it provided an increase of 12 positions and \$207,000. This increase will be used to develop a practical system of home fluoridation and to implement, through State Health Departments, educational programs to promote use of auxiliary personnel by the practicing dental profession.

Activity No. 2(d)—Coordination and development of dental resources

The full amount requested of \$320,000 and 30 positions was allowed by the House and in addition it provided an increase of 24 positions and \$452,000. This increase will be used to determine the most advantageous and economic methods for incorporating training in the use of auxiliary personnel into dental school curricula, to support studies to determine the essential training requirements for auxiliary personnel, and to initiate studies in the various aspects of methods and plans for prepaying dental care, and thus provide more dental care for more people.

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

PREPARED STATEMENT

Dr. KNUTSON. Mr. Chairman, I have with me Dr. Arnold, Director of the Institute to assist me in some of the details of this budget.

Senator HILL. All right, Doctor.

Dr. KNUTSON. I am covering the budget for three areas, two in addition to the National Institute of Dental Research.

Senator HILL. All right, sir.

Dr. KNUTSON. And I have a detailed statement which I shall be glad to submit and if you wish read a brief summary.

Senator HILL. All right. That will be fine, Doctor.

(The statement referred to follows:)

STATEMENT OF CHIEF DENTAL OFFICER PUBLIC HEALTH SERVICE ON DENTAL HEALTH ACTIVITIES

Mr. Chairman and members of the committee, this statement is presented in behalf of those activities of the Public Health Service concerned with the prevention, control, and treatment of diseases and abnormal conditions of the oral cavity. The budget proposal before you requests an appropriation of \$7,420,000 for support of these activities in 1960. This is the same as the 1959 appropriation, but is \$2,000 greater than the 1959 obligation plan.

The universal affliction of dental disease and the accompanying financial burden now borne by the American people has been brought to the attention of this committee on previous occasions. This appalling physical and financial burden is further aggravated by a population growth of 3 million persons a year creating a situation which demands an increasing number of dentists and auxiliary personnel. While the total number of qualified dentists has increased in the last 3 decades, the total population of the country has increased at an even greater rate. To attack this problem solely in terms of increasing the supply of dentists would be unrealistic and would fall well short of the desired goal. Recognition of this fact has led to the initiation of studies involving the ex-

panded and more effective use of auxiliary dental personnel, such as chairside assistants and dental hygienists. These studies indicate that utilization of such personnel permits a significant increase in patient load per dentist.

At the practical level, dentistry today faces a major public health problem with respect to the chronic and prevalent diseases of an aging population (65 years and older) that is expected to increase from 15 million to 21 million by 1970. Through programs of public education and through the development of resources for dental manpower we shall continue to impress upon our people the need for continued dental protection, the importance of good oral hygiene, and the vital role of nutrition in the maintenance of oral health. However, despite the unquestioned importance of these efforts, they are but stop-gap measures in a broadening attack to solve the many still remaining problems of oral disease etiology.

A few years ago, investigators in the dental sciences working alone in small laboratories could, and in fact did, make significant discoveries using relatively simple, inexpensive equipment. While this is still possible in certain fields, the long-range, successful exploration into the etiology of oral disease requires knowledge drawn from all of the basic sciences and depends increasingly on the collaboration of groups of scientists working together with more refined instruments and expanded research facilities.

Prominent among the characteristics of fundamental research in dentistry is the enormous complexity of the oral environment which, in turn, reflects the magnific complexity of the human body. Furthermore, as we gain new knowledge of oral biologic systems and their interrelationship with the whole body we find our problems multiplying and becoming even more complex. This is the price we pay for learning.

This year heralds the beginning of the second decade of research by the National Institute of Dental Research. The discovery during the early years of research of the highly significant relationship of fluoride in drinking water to dental caries and its rapid adaptation to public use is without doubt the most significant development in the history of preventive dentistry. After more than a decade of study by the National Institute of Dental Research, beneficial results are not only continuing to be evidenced in children born subsequent to fluoridation, to the extent of 60-65 percent reduction in dental caries, but also in children whose teeth had already calcified before the beginning of fluoridation. Thus, although dental caries continues as a major health problem, each passing year sees progressive benefits to communities with fluoridated drinking water. As of January 1, 1959, a total of 34,699,356 persons in 1,762 communities were drinking water routinely fluoridated.

Despite the unchallenged value of present-day caries-control measures, still more imaginative concepts will be required if the ultimate goal of prevention of oral disease is to be achieved. Ten years ago space exploration was considered by many to be an imaginative dream; yet today we see it as a reality. Similarly, the phenomenal progress of dental research in recent years demands of us that constant reappraisals be made of the past and current concepts. For example, there is today limited data from our laboratories which indicates that dental caries is closely related to a transmissible bacterial flora and that it might therefore be considered a contagious disease under certain conditions. A further finding of significance is that animals totally free of bacteria; i.e., germ-free rats and hamsters, are also free of dental caries. On the other hand, no such evidence is yet available on the subject of tartar formation. Since current concepts hold that the microorganisms normally inhabiting the mouth are primarily responsible for calculus deposits and that these formations, in turn, provide the initial irritant in the sequence of tissue changes leading to pyorrhea, the questionable role of bacteria in the etiology of calculus becomes most important.

In programing for 1960, the Dental Institute has endeavored to provide support only for those studies most likely to realize the objectives of improving the oral health status of the Nation. Such programing will, while serving to prepare the Institute for the transition period related to occupancy of the new dental research building in November 1960, allow a beneficial review of our on-going programs pointing toward expansion into the most promising areas of research. In ensuing years, the provision of modern, adequate laboratory facilities will measurably enhance the stature of our Institute and will attract, in increasing numbers, outstanding visiting scientists from both the United States and foreign countries. The encouragement and support of such collaborative

research ventures and the reciprocal assignment of National Institute of Dental Research scientists to various research centers should bring mutual benefit to all participants and contribute to earlier major breakthroughs in the oral health field.

While continuing to assume a major responsibility for conducting fundamental research on the specific oral diseases related primarily to cause, control, and eventual prevention, the National Institute of Dental Research program of research in 1960 will give increasing attention to basic, non-disease-oriented studies primarily in the biophysical and biochemical field. Formulating plans on the basis of research accomplishments during the current year, the direction and support of future activities will necessarily be proportional to their demonstrated productivity, importance to the oral health field, and facilities and personnel available. In this manner, strength will be concentrated for expansion in certain areas, whereas others, as progress justifies, will either be maintained at current levels or curtailed.

In the field of research grants, major shifts in emphasis for the use of 1959 funds have been made, as recommended, for specific research areas concerned with oral health. Awards for research projects continue with emphasis in the fields of oral-systemic and chronic disease relationships, epidemiology, periodontal disease, and aging.

A brief description of the dental health programs in 1959 and plans for their continuation in 1960 are included in the following pages.

GRANT PROGRAMS

Research projects

Funds made available in 1959 were expended largely for the purpose of extending, on a broader and firmer base, the support of those institutions and individuals who had received grants in prior years. Continued emphasis on such representative programs as periodontal disease, oral manifestation of aging, cleft palate and speech pathology, dental public health, etc., is indicated in the coming year.

A shift in emphasis in the design of dental research projects continued to manifest itself during 1959 as a broadening concept under which research teams composed of clinicians, biometricians, public health personnel, and scientists in the basic disciplines attacked the problems of oral health not only as a physiological consideration, but also from the standpoint of oral-systemic relationships and as a condition which relates to the social, economic, and educational order of a community or geographic area.

The increased number of research projects, from 292 in 1958 to an estimated 327 for 1959, represents participation by almost all of the Nation's dental schools, in addition to other scientific or academic institutions. Analysis of all projects indicates that the large majority of these continue to emphasize research in the basic sciences such as biochemistry, microbiology, genetics, pathology, nutrition, and growth and development, as related to oral disease.

Research fellowships

Continuation of the fellowship program in 1959 as an integral part of the overall grant-supported programs has shown it to be a most effective mechanism for offsetting the shortage of qualified research workers oriented in the dental sciences.

Awards during 1959 were distributed among 57 institutions in 27 States, the District of Columbia, and Puerto Rico, with all but one of the Nation's dental schools now participating. Among the 51 graduate fellowship awards, 11 were concerned with research utilizing clinical disciplines (orthodontia, periodontia, oral surgery, pedodontia, and operative dentistry), while 40 were primarily oriented toward training in the basic biological sciences.

Training grants

The graduate research training program is designed to produce greater research potential in the Nation's dental schools. Through the support of research training centers for dental graduates, not only is greater competence in research operations being achieved, but the value of research in meeting oral health problems continues to be more forcibly presented to undergraduate dental students by faculty trained under this program.

Since the inception of the program in 1957, the newly established research training centers have demonstrated steady progress in meeting the acute shortage of professional dental personnel trained to engage in research or teaching.

Furthermore, the funds used to date have shown that there are an increasing number of dental graduates each year who are enthusiastic about preparing for a career of research or research in conjunction with teaching.

RESEARCH AT BETHESDA

Dental research at Bethesda is best demonstrated through its broad approach to a comprehensive understanding of the cause and control of oral disease and related disorders. Principal investigators representing such diverse scientific disciplines as biochemistry, bacteriology, genetics, oral pathology, epidemiology, histology, and biophysics are individually and collectively opening new avenues of knowledge in both the dental, as well as the medical sciences. Working in concert with laboratory personnel, dental clinicians seek to encourage the clinical application of basic laboratory findings as they might relate to causes, diagnosis, and treatment and prevention of oral disease.

In 1960, attention will continue to be directed toward amplification of those research areas showing greater promise. Included among these are the following:

Studies on the nutritional aspects of oral disease

The study of nutritional factors relating to the cause and control of dental caries continued to make significant progress in 1959. Representative among this program is the study of the dibasic phosphate compounds as a dietary control of dental caries.

Recent nutrition studies with Swedish children, extensive National Institute of Dental Research studies with white rats, and similar studies of other investigators have provided evidence of a direct relationship between certain mineral phosphates and a significant reduction in dental caries. A better understanding of this relationship and its possible application as a dental public health measure will be explored by clinical tests in 1960. Cooperating with the Dental Institute in this study are the National Institute of Arthritis and Metabolic Diseases, the Division of Indian Health, and the Bureau of Indian Affairs.

Other aspects of the influence of nutrition on dental caries, as mentioned before, are being carried out in the field of protein biochemistry. For example, evidence is now available which shows a relationship between protein and dental caries, i.e., lysine deficiency which is conducive to dental caries suggests a condition of abnormal relationship or imbalance of essential amino acids in diet. Unlike the presumed local action of phosphate minerals in reducing dental caries, the beneficial effects of lysine seem to be mediated through some extra-oral systemic activity.

Epidemiological approach to the study of periodontal disease

Although the onset of periodontal disease may occur early in life, its onset is insidious and its destructive progress so slow that major health damage is usually delayed to middle and later life. Current studies show that by age 45, one out of two persons are affected by periodontal disease and that about one person in six requires definitive periodontal treatment, extraction of teeth, or both.

The expansion in 1959 of epidemiological and biometric studies to include various population groups in this country, as well as in India, Alaska, and Ethiopia, is contributing not only to a better understanding of oral disease patterns of prevalence and severity, but also to the further development of improved testing methods and treatment of periodontal disease.

For instance, in India it was found that considerably more advanced gingivitis exists at earlier ages than in the United States. In the Alaskan study, preliminary examination of more than 700 Eskimos has revealed significant data. In comparing the prevalence of oral disease in individuals living under relatively civilized conditions with that of men from primitive villages, it was found that many of the latter were essentially free of both dental caries and periodontal disease. Early findings seem to indicate that when Eskimos have lived for some time under relatively civilized conditions, the prevalence of oral disease increases to a point quite comparable to the average adult male population in the United States. Data now being collected under different environmental conditions but from similar population groups in Ethiopia promises greater insight into the influence of nutritional and environmental factors on oral health.

Recognizing the increasing physical and financial burden imposed by periodontal disease and the urgency of mounting a broadened research attack on

this major health problem, the Dental Research Council is now studying ways and means of providing more effective support and expanding the clinical and basic research teams located within the dental schools and other non-Federal institutions in this country and abroad.

Microbiological studies

The magnitude and complexity of the oral microbial flora has long stood as a natural barrier in the study of the suspected causal relationship of bacteria to diseases of hard and soft tissues of the mouth. Recognizing the great potential of germ-free animals as a research tool ideally suited for studies in oral microbiology, the National Institute of Dental Research initiated a limited program in 1959 applying this technic to the study of the etiology and mechanism of caries, tartar formation, and periodontal disease.

It is now well established that germ-free rats do not develop caries even when maintained on diets which consistently produce severe caries in conventional animals. In preliminary studies by National Institute of Dental Research scientists, dental caries has been successfully produced in germ-free animals by inoculating their oral cavities with a single pure strain of bacteria (streptococci) originally isolated from carious rats. The characteristics and severity of the resulting carious lesions were comparable to those seen in conventional animals. These findings, preliminary in character, suggest that this family of bacteria, together with others hitherto ignored in considerations of caries etiology, warrant further study.

With reference to the incidence of pathogenic or potentially pathogenic fungi from various sites within the oral cavity, significant studies in the laboratory of microbiology have led to the isolation of an unusual and hitherto little known organism known as the *Leptotrichia buccalis*. Essentially anaerobic, branching and filamentous in form, these organisms are being evaluated by investigators at both the National Institute of Dental Research and at Duke University School of Medicine to determine their specific identity, nature, taxonomic position, pathogenicity, and significance in relation to caries and tartar formation.

Histology and pathology

Productive utilization of electron and X-ray microscopy in basic studies of the ultra structure of the mature calcified tissues, cellular changes in growth and development, the mechanisms of calcification and the effects of fluoride and related compounds on tooth enamel continued in 1959 to add new and significant knowledge to the field of dentistry. Scientists in the Laboratory of Histology and Pathology reported some of their work in a recently published atlas reporting on one of the first embryological studies made at the electron microscope level. The report is a comprehensive treatise that extends beyond the area of histogenesis of dentin in illustrating the several structural changes undergone by a group of cells during their differentiation. In addition, it depicts the subsequent alterations that accompany the tissue forming activities of these cells. Because of its unusual breadth and systematic approach to a better understanding of dental histogenesis, this publication is proving to be of considerable interest to teachers in the dental and basic sciences as well as researchers.

Additional histological studies of possible diagnostic importance relating to the application of new histochemical methods for studying protein and enzyme components of oral tissues were continued during the current year.

Clinical research

As clinical research enters into a number of important areas, efforts related to the evaluation of dental treatment procedures will be emphasized. These activities will include experimental and clinical analysis of physiological response of teeth to high-speed cutting instruments used in operative dentistry, a study of physiologic response to dental anesthetic agents, the formulation of improved principles of design in maxillofacial prosthetics, diagnostic and etiological studies of chronic and acute stomatitis, and histochemical studies of oral tissue.

With an already extensive background of experience in genetic studies, the Dental Institute plans to initiate additional population group studies similar to that currently under way in Maryland. During 1959, a 2-year study of 5,000 offspring of first cousin marriages was begun in Japan in part through the support of National Institute of Dental Research and also with the collaborative sponsorship of the National Research Council and the University of Michigan. Unusual opportunities are thus afforded for assessing the effects of this type

of inbreeding as compared with the continuous type characteristic of the isolate population group now under study in southern Maryland.

In a demonstration of how dental research studies can contribute to the broad field of health, the Human Genetics Section of the Dental Institute recently announced the development of a method for the prediction and early detection of glaucoma disease through study of inheritance patterns among kindred of infected individuals. Based on observations made during studies of hereditary defects in dental tissues it was found that if an individual has an inherited disease, examination of the kindred may reveal additional examples of the disease and thus increase the effectiveness of screening procedures. Further, if the mode of inheritance is dominant, as with glaucoma, one can accurately trace the affected individuals through family history and home visits, and thus identify the sibship that should be examined. During the early stages of a current dental examination program of the isolate population group in Maryland, two patients were found to have chronic glaucoma. A family history of eye disease was obtained for each, and the sibships in which glaucoma was most likely to occur was established. Examination of the selected kindred revealed five cases of frank glaucoma and one glaucoma suspect. Two of the patients were discovered before they were aware of any eye trouble. Additional studies on other families have shown that relatives of affected patients frequently have the disease. Detection tests now being offered by the Prevention of Blindness Society have shown this method of screening, developed by the Public Health Service, to be an effective and practical measure for case finding.

DENTAL PUBLIC HEALTH

Today, the State and local health agencies across our Nation have a major responsibility for coping with the oral disease problem of an expanding and aging population. The Division of Dental Public Health carries out a fourfold technical assistance program to stimulate and support these efforts. It includes: (1) Identifying the dental disease problem on a national basis; (2) developing procedures which can be used to prevent and control dental diseases; (3) promoting the utilization of the procedures developed; and (4) training.

Identification of the dental disease problem

Identification of the national dental disease problem is a continuing activity through which dental diseases are studied in relation to their occurrence in various age, sex, or cultural groups throughout the Nation. Through surveys conducted in many States, largely by regional office dental staff working cooperatively with representatives from State and local health agencies, the extent of dental caries as it occurs in different age and racial groups is becoming increasingly well documented, thereby providing a firmer base for planning and measuring effectiveness of control programs. Currently, emphasis is being placed on studying dental diseases among the chronically ill and aged, the mentally ill, and handicapped individuals.

Development of procedures for use in preventing and controlling dental disease

Applied research is carried out by the Division in order to develop and improve procedures useful in preventing and controlling dental disease. This research ranges from studies of various tooth decay preventives such as sodium and stannous fluoride to studies of methods for organizing dental health services for the chronically ill on a communitywide basis. Applied research activities, for example, continue to stress the development of simpler, more efficient and less costly fluoridation and defluoridation processes. Better methods for testing the fluoride concentration of water have been developed to a point where fluoridation installations in the near future may be controlled through automation with greater precision than is possible using manual methods.

Dental care studies of the chronically ill and aged, initiated in 1957, already give evidence of great potential value. From the first communitywide study of the dental service needs of homebound and institutionalized, chronically ill and aged persons being carried out by the Division in Kansas City, valuable information has been obtained on the dental treatment needs of this group; treatment techniques for those whose dental treatment is complicated by severe physical or mental illness are being worked out; administrative problems concerned with locating these groups and financing and providing care are being identified; and, prototypes of special equipment needed for treating the homebound or bedfast are being developed.

Since so many dental disease preventive and control measures (toothbrushing, dentist visits, proper diet) require the continuing personal participation of individuals throughout their lives, studies are being conducted to identify some of the underlying reasons why individuals either do or do not avail themselves of dental services or adopt preventive health practices. One major field study of the health attitudes and behavior of individuals has recently been completed by the Division in New York State. Data gathered from this and succeeding studies will enable a more complete understanding of those motivating factors which cause people to carry out, or fail to carry out, recommended health practices.

Promotion of dental public health measures

For the past several years, a major activity of the Division has been the provision of consultation and technical leadership to State and local health departments and community groups in a direct attack on the tooth decay problem in the United States. Through a cooperative National-State-local effort, continuing efforts are being made to achieve widespread application of community water fluoridation as a method for preventing tooth decay.

Fluoridation progress has been satisfactory in the large cities, but only 5 percent of the almost 15,000 communities with populations under 2,500 have fluoridated their water supplies. Since individuals having the necessary technical skills to plan and implement fluoridation often are not available in small communities, State health departments and the Division must provide substantial assistance to such communities in their efforts to obtain fluoridation. Although some progress has been made, the bigger job is yet to be done.

Progress is being made in extending the benefits of fluoridation to people served by community water supplies, but more than one-third of the population of the United States consumes water obtained from other than communal sources. To meet this special need, simple and apparently practical methods for individual home water fluoridation have been developed and subjected to limited field testing. Attempts to stimulate private enterprise in making home fluoridation available to the general population are being continued; however, commercial concerns which might be expected to offer home fluoridation service are reluctant to do so until additional evidence is provided supporting the contention that home-fluoridation is technically and economically feasible.

In addition to providing assistance concerning fluoridation, the Division staff will be working out of eight regional offices and the central office in 1960, providing consultation and technical assistance in such areas as program and clinical administration, dental hygiene, informational materials development, and statistics. Division personnel engage in many cooperative activities with State health agency personnel, helping them to identify the problems within the State which should receive primary attention, aiding in planning disease prevention and dental care programs, and assisting in program evaluation. Such consultation has proven invaluable in development of more effective State and community wide programs.

Training

Assistance is currently being provided in a number of areas related to training. These include, among others, assistance to academic institutions in developing curriculums for dental health workers where Division staff members frequently serve as guest lecturers. Short courses on fluoride analytical methods are also provided for waterworks personnel. Also, within the Public Health Service, the possible retirement of key career employees and added responsibilities in the broadening field of dental health have amplified the need for an expanded and accelerated program of staff training to include graduate training in public health as well as assignment to regional offices and to State health departments to acquire programing experience at those levels.

DENTAL RESOURCES

The activities of the Division of Dental Resources center around the search for more effective means of extending better dental care to a greater segment of the national population. The search for solutions today must be conducted against a background of manpower shortage, for the Nation's supply of active dentists has been declining relative to population for more than a generation. Our schools are still not producing enough new dentists to pace population growth even though enrollments have nearly doubled since the end of World War II.

A reservoir of professional skills, more efficiently used, continues, therefore, to be a first objective of the Division's program. During the past year, the Division of Dental Resources added another to its series of regional manpower studies which are designed to assist State and regional groups in planning for needed school expansion. After an appeal from the University of Illinois for assistance in determining that State's dental school expansion needs, the division selected the Great Lakes region as the fourth to be surveyed.

The three earlier studies covering the West, the South, and more recently, New England, were completed in cooperation with the several regional boards of education. Consultative services and staff assistance continues to be provided to these regional organizations as well as to several universities in their efforts to enlarge dental training capacity. The Division plans during the coming year to complete the series of regional manpower studies with surveys of the Midwest and Mid-Atlantic States and then to summarize and combine the completed series into a single publication defining the situation in the United States as a whole.

Programs aimed at better utilization of the dentists' time and skills also continued in 1959. A research and demonstration project designed to teach dental students to use dental assistants effectively is now in its third year of operation. Six schools are participating and each has completed at least 2 years of the program. Since nearly all of the Nation's dental schools recognize the need to modify the dental school curriculum to assure that their graduates are versed in the technics of employing the assistant's skills productively, the new teaching methods being developed in this project will, when sufficiently evolved, have immediate and widespread application.

Unless the use of chairside assistants can produce an increase in dentists' productivity comparable to that achieved during the past two decades by the wider employment of laboratory technicians, the shortage of dentists will grow considerably more serious. In the face of our failure to produce enough dentists to keep up with population growth, per capita demands for dental care are rising steadily—the product of a better educated, more health conscious population. Dental care plans akin to Blue Cross and Blue Shield in the medical and hospital field are an important manifestation of this trend, and efforts to assure their orderly growth and measure their impact will continue in 1960 as an important activity of the Division.

At the present time, three State dental societies have fully operating dental service corporations, three others have completed incorporation of their service plans and will soon begin operation, and at least 10 additional State dental societies have plans in various stages of study or development. Fully operating postpayment or budget payment plans now exist in 38 States. In addition to supplying the assistance requested during the past year by State societies, the Division cooperated with two States in studies of their postpayment plans. Also under study during the year were four different types of prepayment plans serving specific population groups. A part of the Division's continuing program is to develop and make available information which will help voluntary prepayment programs to be established on a sound basis. An analysis of utilization patterns in a health clinic operated by a union was completed during the year, providing much-needed information on dental needs and treatment demands among a relatively low income group. A similar study of dental services given Public Health Service and Coast Guard families provided similar data for a better educated, higher income group.

SUMMARY

In summary, programing for 1960 has led to a shift in emphasis to studies most promising to the realization of the objectives of improving the oral health status of the Nation. Such programing at National Institute of Dental Research, while enabling a beneficial review of current programs, will further serve to prepare the Institute for the transition period related to occupancy of the new dental research building in November 1960. During 1960, activity in the areas of dental public health and dental resources will be carried on at present levels of operation. Current programs in these areas will continue toward developing means for improving the potential of our limited dental manpower through use of auxiliary dental personnel; identifying oral disease problems on a national basis; and developing public health measures such as fluoridation for use by those State and local authorities desiring progressive dental health programs.

In the extramural programs of National Institute of Dental Research, grant awards will continue in 1960 at essentially the same level with emphasis in the fields of oral systemic and chronic disease relationships, epidemiology, periodontal disease, and aging. Increased interest in the dental training program is indicated in the coming year.

In conclusion, it can be said that 1960 is the year in which dental health activities will be primarily concerned with reviewing its ongoing programs pointing toward expansion into the most promising areas of basic and applied research in ensuing years.

EXTENT OF DENTAL PROBLEM

Dr. KNUTSON. Mr. Chairman and members of committee, there are currently over 170 million people residing in these United States, 95 percent of whom have, or will have need of dental care. Those that avail themselves will spend \$1.7 billion for this service in the coming year. Against this gigantic health problem, there is a force of about 90,000 practicing dentists. In 1975 our population will swell to an estimated 228 million people and we shall need 130,000 dentists to meet the newly rising demand for dental care. Even if we build all of the projected new dental schools and expand existing facilities, the estimates are that the population per dentists will further increase.

It is against this background that the opening statement is presented in support of the dental health activities of the Public Health Service. These activities are directly concerned with fundamental research on the cause and prevention of oral diseases and related conditions, including support of research projects and training grants to non-Federal institutions; the development of dental resources; and furnishing consultant and technical assistance to State and local dental programs.

AMOUNT REQUESTED

The budget proposal before you requests an appropriation of \$7,420,000 for support of these activities in 1960 which is the same as the 1959 appropriation.

Programing for research at the Dental Institute in 1960 is designed to enable a beneficial review of current programs, while pointing toward occupancy of its new research building in December 1960. In ensuing years, the provision of these modern, and more adequate laboratory facilities will afforded greater opportunities for the Institute staff and will attract, in increasing numbers, outstanding visiting scientists from both the United States and foreign countries. While continuing to assume a major responsibility for carrying out fundamental research on specific oral diseases such as caries and periodontal disease, the research program in 1960 will give increasing attention to fundamental, nondisease oriented studies primarily in the biophysical and biochemical field. Representative among such programs is the study of the dibasic phosphate compounds which show promise as an effective dietary control of dental caries. Clinical trials with one of these compounds are scheduled for 1960. In the field of protein biochemistry, evidence is now available which shows a relationship between protein and dental caries, i.e., lysine deficiency which is conducive to experimental dental caries. Unlike the presumed local action of carbohydrates and phosphate minerals the beneficial effects of lysine seem to be mediated through some extra-oral systemic activity.

FOREIGN EPIDEMIOLOGICAL STUDIES

Further, in collaboration with the Interdepartmental Committee on Nutrition for National Defense, epidemiological and biometric studies have recently been conducted in Alaska and Ethiopia and will be extended this year to other foreign countries. These studies are contributing to a better understanding of oral disease patterns especially of periodontal disease, the main cause of tooth loss in the United States beyond age 40.

STUDIES IN MICROBIOLOGY

In the field of microbiology, studies begun during the past 2 years using germ-free animals will be emphasized. These efforts in 1960 will be concentrated on an evaluation of selected pure strains of oral bacteria and their possible relation to dental caries.

EXTRAMURAL PROGRAMS

In the extramural programs of the Dental Institute, grant awards will continue in 1960 at essentially the same level, with emphasis in the fields of oral, systemic and chronic disease relationships, cleft lip and palate, periodontal disease and aging.

FELLOWSHIPS AND TRAINING GRANTS

Increased interest in the fellowship and training grant programs is indicated in the coming year. Reflected in this is the increased awareness by the dental profession of the immediate and projected need for more teachers and research workers oriented in the dental sciences. It is primarily through the dental training programs that much of this need will be met.

FLUORIDATION OF WATER

In the area of dental public health, efforts toward the fluoridation of communal and noncommunal water supplies continued to receive considerable attention in 1959. Although measurable progress has been made in the larger cities, 95 percent of the almost 15,000 smaller communities still have not adopted this effective caries control measure.

At the individual level more than one-third of the U.S. population now consumes water obtained from other than communal sources. To meet this special need, simple and practical methods for home fluoridation have been developed and are being subjected to limited field testing.

Efforts to stimulate private enterprise in making home fluoridation equipment and services available to the general public will continue in 1960.

ORAL DISEASES AT VARIOUS AGE LEVELS

Other representative activities of the Division in 1959 included the study of oral disease in relation to national occurrence in various age, sex, and cultural groups.

Currently, emphasis is being placed on studies among the chronically ill and aged, the mentally ill, and handicapped individuals.

STUDY OF DENTAL RESOURCES

A reservoir of professional skills, more effectively used, continued in 1959 to be a prime objective of our Division of Dental Resources.

During the past year, the Division added another to its series of regional manpower studies which are designed to assist State and local groups in planning for needed school expansion.

A fourth survey is now underway covering the Great Lakes region. Current estimates indicate we would need 250,000 dentists working for 10 years to eliminate the present backlog of dental care. Consideration of this present and projected dental manpower shortage led some 2 years ago to the initiation of studies involving the expanded use of auxiliary personnel such as chairside assistants and dental hygienists.

These studies already indicate that the use of such personnel by practitioners permits a significant increase in patient load per dentist.

Also under study during the past year were a variety of dental prepayment plans serving specific population groups. Activities such as these are part of the Division's continuing program to develop and make available information which will help voluntary prepayment programs to become established on a sound basis.

In conclusion, it can be said that 1960 is the year in which our dental health activities will be primarily concerned with continuing the on-going programs pointing toward strengthening activities in the most promising areas of dental research, resources and public health in ensuing years.

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$2,305,000 for dental health activities. As the Secretary indicated this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

ACTIVITY NO. 1 (A)—RESEARCH PROJECTS

The full amount requested of \$3,444,000 was allowed by the House and in addition it provided an increase of \$1,032,000. This increase will be used to support research projects in the areas of aging, periodontal disease, cleft palate, and other congenital anomalies and dental caries. This is an increase of \$1,049,000 over the 1959 appropriation.

ACTIVITY NO. 1 (B)—RESEARCH FELLOWSHIPS

The full amount requested of \$423,000 was allowed by the House and in addition it provided an increase of \$77,000. This increase will be used primarily to allow for additional and much needed support for the dental student part-time fellowship program.

ACTIVITY NO. 1 (C)—TRAINING

The full amount requested of \$650,000 was allowed by the House and in addition it provided an increase of \$350,000. This increase will be used for expansion of the training program to serve the needs in

our dental schools for well qualified teachers and research workers in both clinical and basic science fields.

ACTIVITY NO. 2 (A)—RESEARCH

The full amount requested of \$1,377,000 and 111 positions was allowed by the House and in addition it provided an increase of \$144,000 and 12 positions. This increase will be used (1) to support expanded germ-free studies; (2) to expand nutritional studies as related to the evaluation of food supplementation with mineral phosphates; and (3) to expand field studies on the epidemiology of oral disease. This is an increase of \$125,000 over the 1959 appropriation.

ACTIVITY NO. 2 (B)—REVIEW AND APPROVAL OF GRANTS

The full amount requested of \$137,000 and 11 positions was allowed by the House and in addition it provided an increase of 4 positions and \$43,000 to be used to service the expanded grants programs. This is an increase of \$47,000 over the 1959 appropriation.

ACTIVITY NO. 2 (C)—PROFESSIONAL AND TECHNICAL ASSISTANCE

The full amount requested of \$983,000 and 91 positions was allowed by the House and in addition it provided an increase of 12 positions and \$207,000. This increase will be used to develop a practical system of home fluoridation and to implement, through State health departments, educational programs to promote use of auxiliary personnel by the practicing dental profession.

ACTIVITY NO. 2 (D)—COORDINATION AND DEVELOPMENT OF DENTAL RESOURCES

The full amount requested of \$320,000 and 30 positions was allowed by the House and in addition it provided an increase of 24 positions and \$452,000. This increase will be used to determine the most advantageous and economic methods for incorporating training in the use of auxiliary personnel into dental school curricula; to support studies to determine the essential training requirements for auxiliary personnel, and to initiate studies in the various aspects of methods and plans for prepaying dental care, and thus provide more dental care for more people.

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

Senator HILL. It would be your professional judgment, would it not, that these increases could be effectively used?

Dr. KNUTSON. Yes, sir, it would be my professional judgment that these increases could be effectively used.

FUNDS FOR FLUORIDATION

Senator HILL. Doctor, how much of your funds are you using now on fluoridation?

Dr. KNUTSON. Mr. Chairman, it is difficult to answer that question directly. None of our funds are specifically earmarked for promoting water fluoridation.

Each of us who are in the dental program and those who are concerned with other health programs, including our Surgeon General,

in making recommendations for improvements and for application of present research knowledge do, in effect, promote water fluoridation, because it is a procedure that has been recommended for adoption by communities.

As you know, the communities decide for themselves whether or not they will use this very effective method of preventing dental caries.

AVAILABILITY OF HEALTH INFORMATION

Senator HILL. Well, now, in addition to your research, part of your program is what we might call educational; is that true?

Dr. KNUTSON. Yes, sir. We are directed by law to make available to State health authorities and other health authorities concerned with the application of health knowledge—we are directed to make that technical information available to them for their use.

And in an area such as fluoridation we receive a considerable number of requests for specific information on the technology available for the application of this procedure.

Senator HILL. To what do you ascribe the failure of so many small communities to adopt the fluoridation program?

Dr. KNUTSON. It is difficult to give a precise answer to that, other than a guess as to reasons for their failure. Perhaps one of the reasons is that they do not have the technical guidance available locally to satisfy requests fully for information in this area.

This is reflected by the fact that two-thirds of the major cities in this country—that is those with populations of 500,000 or over—the cities which have the large medical schools and the top level health departments—two-thirds of those cities are fluoridating their drinking water at the present time.

Senator HILL. In other words, in two-thirds of the cities this matter has really been brought to their attention, so to speak, by those in whose authority they have confidence?

Dr. KNUTSON. Not only brought to their attention, sir, but these larger cities have dental health programs specifically for promoting the application of modern preventive procedures.

Senator HILL. And this is a modern overall program?

Dr. KNUTSON. Yes, sir; that is true.

The small local communities don't have dental personnel specifically assigned to the task of promoting the application of preventive procedures other than that which comes through the general practitioners encouraging its use.

PROGRESS ON NEW BUILDING

Senator HILL. How is the building coming along out at the Institute.

Dr. KNUTSON. We are getting a progressively larger hole there, Mr. Chairman. And we feel that it is progressing well.

Senator HILL. It is coming right along, is it?

Dr. KNUTSON. Yes.

Dr. SHANNON. That is a cavity they want to fill.

Senator HILL. It looks like they are about to get it filled.

Dr. KNUTSON. This one is being prepared by a steam shovel rather than with a dental drill.

NEW YORK'S WATER NOT FLUORIDATED

Senator HILL. The clerk has just told me that New York City does not have fluoridated water. I had read that in the New York Times. In fact they have been having quite a debate in New York over this question, haven't they?

Dr. KNUTSON. Yes. They have been considering this matter for several years. It is of interest that they have appointed special task forces or committees to examine the problem and in each instance it has been recommended that fluoridation be put into practice in New York City.

Senator HILL. The recommendation has always been there and the city has not yet adopted such a program; is that right?

Dr. KNUTSON. Not yet, sir.

Senator HILL. When did you say you expect to get into the new building at the Institution, Doctor?

Dr. KNUTSON. December 1960. Or perhaps the latest would be January 1961.

Senator HILL. Well, that would be about a year and a half.

Dr. KNUTSON. Yes, sir.

Senator HILL. It is coming right along, then?

Dr. KNUTSON. Yes, sir; at long last.

Senator HILL. Dr. Arnold, we would be happy to have you make any statement you see fit.

Dr. ARNOLD. Thank you, Mr. Chairman. I think Dr. Knutson has pretty well covered the program.

Senator HILL. Anything you would like to add, Dr. Shannon?

Dr. SHANNON. No, except to say we are delighted that at long last the Dental Institute is getting its building.

Senator HILL. Well, gentlemen, you all are very kind. We appreciate very much your being here. I want to thank you very much.

ARTHRITIS AND METABOLIC DISEASE ACTIVITIES

STATEMENT OF DR. FLOYD S. DAFT, DIRECTOR, NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES; ACCOMPANIED BY DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For expenses necessary to carry out the purposes of the Act relating to arthritis, rheumatism, and metabolic diseases, \$31,215,000."

Amounts available for obligation

	1959 appropriation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$31,215,000	\$31,215,000	\$37,790,000
Deductions: Unobligated balance, estimated savings.....	57,000	0	0
Total obligations.....	31,158,000	31,215,000	37,790,000

Obligations by activities

Description	1959 appropriation		1960 budget estimates		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Grants:						
(a) Research projects.....		\$18,649,000		\$18,898,000		\$24,096,000
(b) Research fellowships.....		337,000		337,000		337,000
(c) Training.....		4,435,000		4,435,000		5,298,000
2. Direct operations:						
(a) Research.....	438	7,063,000	438	6,837,000	456	7,269,000
(b) Review and approval of grants.....	34	507,000	34	546,000	39	620,000
(c) Administration.....	12	162,000	12	162,000	12	170,000
Total obligations.....	484	31,158,000	484	31,215,000	507	37,790,000

Obligations by objects

Object classification	1959 appro- priation	1960 budget estimate	1960 House allowance
Total number of permanent positions.....	484	484	507
Full-time equivalent of all other positions.....	8	8	9
Average number of all employees.....	448	458	476
Number of employees at end of year.....	483	483	507
01 Personal services.....	\$3,225,000	\$3,303,200	\$3,464,500
02 Travel.....	101,100	100,800	116,100
03 Transportation of things.....	18,500	18,500	18,500
04 Communication services.....	38,300	38,300	39,500
06 Printing and reproduction.....	2,100	2,100	2,100
07 Other contractual services.....	270,800	262,700	351,400
Reimbursements to "National Institutes of Health management fund".....	3,075,000	2,833,000	2,967,000
08 Supplies and materials.....	531,100	525,100	545,200
09 Equipment.....	367,300	349,500	433,300
11 Grants, subsidies, and contributions.....	23,371,000	23,620,000	29,681,000
Contribution to retirement fund.....	158,100	162,100	171,300
13 Refunds, awards, and indemnities.....	1,200	1,200	1,200
15 Taxes and assessments.....	11,400	11,400	11,800
Subtotal.....	31,170,900	31,227,900	37,802,900
Deduct quarters and subsistence charges.....	12,900	12,900	12,900
Total obligations.....	31,158,000	31,215,000	37,790,000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	484	\$31,215,000
Deduct unobligated balance, estimated savings.....		57,000
1960 base.....	484	31,158,000
1960 appropriation request.....	484	31,215,000
Net change requested.....	0	+57,000

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Decreases:				
Net change in reimbursement to "National Institutes of Health management fund"-----		\$242,000		\$108,000
Partial absorption of cost for annualization of personal services-----		32,200		32,200
Subtotal decreases-----		274,200		140,200
Increases:				
For mandatory items:				
Annualization of 40 new positions authorized in 1959 for part of year-----		69,900		69,900
Extra day of pay-----		12,300		12,300
Subtotal mandatory increases-----		82,200		82,200
For program items:				
Research projects, increase in average cost-----		249,000		249,000
Research projects in fields such as physical biology, gastroenterology, cystic fibrosis, diabetes, general metabolism, etc-----				5,198,000
Training grants in fields such as physical biology, diabetes, etc-----				863,000
Cost of increased review and approval services-----			5	45,000
Direct research in physical biology-----			7	200,000
Direct research in gastroenterology and epidemiology-----			6	50,000
Direct research in geographic diseases-----			5	50,000
Replace elevator in Building 4-----				35,000
Subtotal program increases-----		249,000	23	6,690,000
Total change requested-----		57,000	23	6,632,000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$6,575,000 for arthritis and metabolic disease activities. As the Secretary indicated this increase is contrary to the fiscal policy of the President's budget by \$6,575,000 for arthritis and metabolic disease activities. the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Activity No. 1(a)—Research projects

The full amount requested of \$18,898,000 was allowed by the House. In addition, the House provided \$5,198,000 for new research projects such as physical biology, gastroenterology, cystic fibrosis, arthritis, and diabetes. This is an increase of \$5,447,000 over the 1959 appropriation.

Activity No. 1(c)—Training

The full amount requested of \$4,435,000 was allowed by the House. In addition, \$863,000 was provided for training in areas such as physical biology, gastroenterology, and diabetes.

Activity No. 2(a)—Research

The full amount requested of \$6,837,000 was allowed by the House. In addition, 18 positions and \$432,000 was provided for direct research in gastroenterology and epidemiology, physical biology, and geographic disease studies, and for the replacement of the elevator in building 4. The increase also provides \$97,000 for reimbursement to the National Institutes of Health management fund. This represents a net increase over the 1959 appropriation of \$201,000.

Activity No. 2(b)—Review and approval of grants

The full amount requested of \$546,000 was allowed by the House. In addition, 5 positions and \$74,000 was provided for the expanded grants program, including \$29,000 for reimbursement to the National Institutes of Health management fund. This is an increase of \$113,000 over the 1959 appropriation.

Activity No. 2(c)—Administration

The full amount requested of \$162,000 was allowed by the House. In addition, \$8,000 was provided for reimbursement to the National Institutes of Health management fund.

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

PREPARED STATEMENT

Senator HILL. We are happy to welcome Dr. Floyd S. Daft, director, National Institute of Arthritis and Metabolic Diseases.

You have a prepared statement and a summation, do you not?

Dr. DAFT. Yes. I have here an opening statement which, if you like, I will submit for the record.

Senator HILL. That will be fine.

Dr. DAFT. I will summarize briefly.

Senator HILL. All right. Go ahead in your own way, Dr. Daft.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES, PUBLIC HEALTH SERVICE ON NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES

Mr. Chairman and members of the committee, the past year has been a particularly productive and rewarding one, and thanks to the support of this committee new activities have been initiated in new fields and old which hold great promise for the future. In our older programs, examples of outstanding accomplishments are: The development of a new pain-killing drug which has advantages over any hitherto available; further advances in the treatment and understanding of rheumatoid arthritis and related diseases; progress in the testing of tolbutamide and other newer oral drugs for diabetes and in clarification of their mode of action; and additions to our store of fundamental knowledge in such important areas of metabolic research as the clotting of blood and the biochemistry of nucleic acids, the chemical substances responsible for the transmission of hereditary characteristics. In addition, the programs in gastroenterology and physical biology are expanding rapidly and soundly, and a beginning has been made on the launching of a broadened attack on the important disease of children, cystic fibrosis.

The budgetary request before you is for \$31,215,000, which is the same amount as was appropriated for 1959, but \$57,000 greater than the 1959 obligation plan.

NEW ANALGESIC

One of the most significant and striking accomplishments of the year is the development of a new synthetic pain-killing drug which appears to be superior to any natural or synthetic compound hitherto available.

This new analgesic, even though its synthesis in large quantities presents some difficulties, gives promise of making this country free of its present dependence on morphine-producing areas of the world. This scientific discovery is particularly timely, coming as it does at a period of imminent morphine shortage.

Powerful pain-killing action, combined with much less tendency to addiction than morphine, has been the aim for many years of chemists engaged in the synthesis of analgesic drugs. This long-sought goal now may have been achieved by Drs. Everette May and Nathan Eddy of the section on analgesics in our laboratories at Bethesda. A new compound, identified as NIH-7519, has been produced which is 10 to 20 times more powerful than morphine, yet on the basis of preliminary laboratory tests appears to be less addicting than morphine. The new drug, obtained by synthesis from simple coal-tar derivatives, not only is a powerful painkiller but also has low toxicity, less depression of respiration, and gives excellent results against certain forms of severe pain (deep-root pain) which even morphine does not satisfactorily suppress.

For many years chemists have been attempting to separate analgesic action from the addiction liability which long seemed inherent in substances as potent as morphine. A wide variety of drugs have been produced, but generally the greater the pain-killing power, the greater also have been addiction and other harmful effects. NIH-7519, however, gives preliminary promise that a partial separation of the analgesic and addicting properties may have been achieved.

In bringing the information on this new analgesic to the fairly complete state reached at this time, several collaborative studies had to be arranged. Addiction studies in monkeys were conducted at the University of Michigan. Chronic toxicity studies and production of supplies necessary for clinical research are being carried on by Smith, Kline & French Laboratories. Patent applications for assignment to the U.S. Government have been filed by our scientists.

RHEUMATIC DISEASES

The year 1958 marks the 10th anniversary of the discovery of the effectiveness of cortisone in the treatment of rheumatoid arthritis. During this past decade there have been very extensive efforts on the part of the pharmaceutical industry to develop new modifications of cortisone which would be more potent and, in particular, would be effective on long-continued administration with a minimum of serious side effects. Four years ago, I had the privilege of reporting to this committee that improved drugs, prednisone and the closely related prednisolone, had been synthesized by a pharmaceutical company and tested by National Institute of Arthritis and Metabolic Diseases Clinical Director, Dr. Bunim, in the Clinical Center at Bethesda. The advantages of these drugs over cortisone and hydrocortisone in most patients were striking and as a result they have replaced the earlier drugs to a large extent. During the past year, what appears to be another considerable advance has occurred. At the annual meeting of the American Rheumatism Association last spring, Dr. Bunim of Bethesda and Dr. Boland of Los Angeles reported the results of clinical trial of a new compound developed by two pharmaceutical companies, which is more active than prednisone and prednisolone and which appears to have a lower incidence of serious side effects. In gouty arthritis (gout) another promising new drug has undergone extensive trial.

Further, the past year has witnessed great activity in the search for the cause of rheumatoid arthritis and related diseases. An area of particular activity has been that of the possible relationship of hypersensitivity to the rheumatic diseases. An allergic component of rheumatic fever was postulated many years ago and a similar etiology might be suspected for lupus erythematosus and even for rheumatoid arthritis. Much new information along these lines has been accumulated during the past year but the evidence, although suggestive, is as yet inconclusive. It is still not at all clear whether by the immunologic approach we are on the verge of recognizing the cause of certain of the rheumatic diseases or whether we are on a false trail.

New attacks on the rheumatic disease problem also include a concerted drug evaluation program and the beginning of a program of genetic and epidemiological studies. Through collaboration with a local university, an outpatient clinic for rheumatic diseases has been established at District of Columbia General Hospital. Studies on large groups of patients in this clinic will supplement the intensive studies carried on in the Clinical Center at Bethesda.

New, more effective antirheumatic drug

A new, more effective and probably safer steroid compound, dexamethasone, 25 times more potent than hydrocortisone and 6 times more potent than prednisone in the treatment of rheumatoid arthritis has been tested by Institute clinicians and by others. A chemical cousin of cortisone, the new compound is the latest result of the intensive efforts of pharmaceutical chemists to modify the basic cortisone molecule in order to increase antirheumatic effectiveness while decreasing the number and severity of undesirable side effects. Although not free of side effects, dexamethasone thus far appears to represent a definite advance over previous compounds.

Institute clinicians, who also conducted the first clinical trials of prednisone in 1954, reported on their preliminary tests with dexamethasone last June, and have since confirmed that this new drug, as compared to prednisone at the same stage of testing, has produced fewer and milder side effects. At a recent conference on dexamethasone in New York City this same favorable impression was reported by other clinicians who are testing the new drug. Minor side effects noted include facial rounding and the stimulation of appetite with resultant marked weight gain. Since arthritics often appear underweight, particularly during the first year of severe disease, this latter side effect may not always be undesirable. Although not completely eliminated, major side effects such as ulcers (common with prednisone), mental changes, hypertension, and interference with carbohydrate metabolism (steroid diabetes), seem greatly reduced

in incidence and extent on the basis of experience to date. Longer term trial, however, will be necessary to confirm these early findings.

Improved treatment of gout

Studies of the metabolism of a drug used as a muscle relaxant, coupled with the alert observation of an Institute grantee, have provided a potent drug for the treatment of gout which is now undergoing clinical trial by Institute clinical investigators. In promoting the rapid excretion of uric acid, it now appears to be three times more effective than any other drug now available.

The drug itself, zoxazolamine (Flexin) is not new; it has been widely used for the relief of muscle spasm for several years. Its application to the treatment of gout followed the discovery that crystals appearing in the urine of patients receiving the drug were uric acid. This observation gave the first clue to the muscle relaxant's powerful ability to promote the excretion of uric acid.

The patient with gout through a probable metabolic shunt or shortcut, overproduces uric acid which accumulates in the body. Accumulations of urate crystals form the characteristic tophi or deposits commonly found under the skin around joints and in ear lobes in patients with chronic gouty arthritis. One of the methods of dealing with the accumulation of excess uric acid is to increase its rate of excretion. Zoxazolamine accomplishes this much more effectively than probenecid, the most active such drug now in use, on the basis of tests and trials to date. An added advantage over probenecid is that action of the new drug is not inhibited by aspirin. Zoxazolamine is thus far relatively non-toxic and not only inhibits the formation of tophi but seems to reduce the size of those already formed.

Studies on the cause of rheumatic diseases

One of the major laboratory efforts to obtain basic understanding of the disease, rheumatoid arthritis, is directed toward determining the precise nature of the substance known as the rheumatoid factor in the serum of patients with this disease. This particular substance, peculiar to patients with rheumatoid arthritis, has already been made use of as a diagnostic label and is the substance detected by various diagnostic tests developed by our grantees and by our own laboratories. The newest and simplest of these tests developed at the National Institutes of Health was reported to this committee last year. It is interesting to note that this test in its original form was developed for use in the detection of trichinosis, a disease of far different characteristics and totally unrelated to arthritis.

This past year particular laboratory progress in this area has been made not with a diagnostic test but with characterization of the factor at its root. Institute scientists have developed a unique and accurate method for determining the relative activity of purified preparations of rheumatoid factor and for precisely measuring its quantity in the serum. This new method can detect in blood relative differences of activity much more sensitively than by any previous means and can provide reproducible quantitative values with extraordinarily fine accuracy. The new technique depends in part upon previous research in the virus diseases and is felt to have significance beyond the confines of rheumatic diseases, the basic principle, that of combining a protein (in this case, the rheumatoid factor) with a second protein (in this case, a virus), affords a method of measuring the exact concentration of the first protein in a way which should be applicable to protein measurement in a wide variety of studies, indicating the diversity of application of sound basic research processes and methods.

The rheumatoid factor thus far has been found to be a gamma globulin, a species of blood protein in which are found the antibodies or substances which provide the body a variable degree of immunity to particular diseases. This has increased the possibility to some extent that rheumatoid arthritis may have as its basis an unusual and deleterious immune reaction to a foreign or an altered native substance, manifested by both generalized or constitutional disease and localized reaction in certain joints. The immunological approach to solution of rheumatoid arthritis is being vigorously pursued by a large proportion of National Institute of Arthritis and Metabolic Diseases grantees, as evidenced by the scientific program of the recent interim session of the American Rheumatism Association. We are not convinced, however, that immunological studies are certain to produce the ultimate definition of this disease and are consequently pushing forward our support on as many fronts as appear logical and promising.

Program developments

A chain of arthritis clinics spanning the country is being organized in a co-operative venture to provide, for the first time, a strictly objective, precise, and uniformly disciplined collaborative evaluation of the therapeutic effectiveness of drugs employed in the treatment of rheumatoid arthritis. The American Rheumatism Association, of which Dr. Joseph J. Bunim, Institute Clinical Director, is president, in cooperation with and with the support of the Arthritis and Rheumatism Foundation and the National Institute of Arthritis and Metabolic Diseases, is setting up the combined clinic organization to accomplish this long-needed service. Continuing results of this program, expected to operate over the course of several years, will provide a source of thoroughly reliable information concerning the absolute and relative merits and limitations of the several antirheumatic agents now in use and to be developed in the future.

Our intramural clinical investigations unit, recognizing the value of larger numbers of ambulatory patients in drug evaluation, has established in collaboration with Georgetown University an outpatient clinic in rheumatic diseases at District of Columbia General Hospital. This will enable us to complement detailed studies on small groups of patients in the clinical center with less intensive studies on larger groups of selected individuals with rheumatic diseases.

There has recently been added to the clinical staff a well-trained epidemiologist. He will receive clinical training in rheumatology in the clinical center and field training in population studies of rheumatic diseases in England and will then be ready to undertake population studies in this country.

DIABETES

Throughout the country a sustained surge of interest in diabetes research has occurred during the past 3 years. Two factors are primarily responsible—the development of oral antidiabetic drugs and the increased grant support available from the Institute.

The emergence of tolbutamide (Orinase) as an effective therapeutic agent for certain types of diabetes has had a stimulating effect upon all aspects of the situation. Patients for whom the drug is suitable have been provided with a much simpler method of control of their disease than insulin; the pharmaceutical industry is busily at work in attempts to develop similar yet better drugs, with some success, as will be described; physicians and scientists have been exhibiting more interest in diabetes problems, and more and more of them have been drawn actively into research in this field. In the Institute's own laboratories work along lines related to diabetes problems has been expanded, particularly in the areas of metabolism, biochemistry, and endocrinology fundamental to increased knowledge concerning the disease process itself, as well as in studies of the action of both the new drugs and insulin. Meanwhile, training programs, supported by grants from the Institute to medical institutions and individuals throughout the country, are providing an increasing supply of trained research scientists and physicians ever better prepared to attack and solve the highly involved problems this complex disease presents.

The oral antidiabetic drugs

Insulin, since 1921, had been the one effective antidiabetic agent in general use throughout the world until the advent of the oral antidiabetic drugs, carbutamide (BZ-55) and tolbutamide (Orinase). Beginning in 1955 these two drugs were thoroughly tested in this country, and one, tolbutamide, emerged successfully from the long series of clinical trials and was placed on the market in June 1957. Trials showed that BZ-55 was too toxic, and it was never released for general use.

In October of 1958 another new oral antidiabetic drug, chlorpropamide, passed its trials and was made available to diabetics upon prescription from their doctors. This drug, sold as Diabinese, is a sulfonylurea like tolbutamide. It has been thoroughly tested, and is apparently relatively free of side effects, and being more potent can be given in smaller doses than tolbutamide; experience to date suggests that chlorpropamide exerts its effects over a longer period and so may provide smoother control of the blood sugar than tolbutamide.

Still another new oral drug is now being tested and may be released in the near future. Known as metahexamide, it, too, is a sulfonylurea compound related to tolbutamide. Early indications are that it also may be more potent and have longer lasting effects.

Not new this year, but still being tested, is a compound, phenformin (DBI), which is not a sulfonylurea so that it acts in a different manner and is effective in some cases where the sulfonylureas are not. However, DBI has also been found to bring on distressing gastrointestinal side effects in some patients.

As the year 1958 ended, it was reliably estimated that in this country more than 400,000 diabetic patients were being maintained on one or another of the oral drugs. Thus, almost one-third of the known diabetics in this country appear to have been transferred to oral medication from insulin injection.

Clinical testing

Institute scientists and grantees are collaborating with the Veterans' Administration in the prosecution of a large-scale study of diabetics in veterans hospitals. In addition, increased support has been given clinical investigators in the medical schools of the country to determine, in large groups of patients and for long periods of time, the precise value of the new drugs in controlling diabetes and in preventing diabetic complications. Although it is, of course, far too early to have learned the value of the oral compounds in preventing the late complications, a great deal of progress has been made in determining their value in day-by-day control of the obvious manifestations of the disease.

The sulfonylureas are effective only in those diabetics who contracted the disease during their later years. They are not effective in cases of severe or "brittle" diabetes in which the onset of the disease occurred in childhood or in the very early adult years—cases in which there is little or no ability of the beta cells to function in supplying the insulin normally needed by the body. With these limitations in mind, however, the oral drugs appear to be very effective in diabetes control.

The oral antidiabetics certainly can be considered a major advance in the treatment of diabetes, freeing many patients of the onerous necessity of using the hypodermic needle needed for insulin medication. It must be borne in mind, however, that the oral compounds now available do not themselves act as insulin does. It is not yet surely known just how these drugs act, despite extensive research by many scientists. The weight of evidence to date has indicated that the sulfonylureas act to stimulate the beta cells of the pancreas to produce more insulin. Increasing evidence has been accumulating during the past year, however, which stresses differences in their action from those of insulin, with significant effects upon the liver and upon peripheral tissues such as muscle, indicating that the blood sugar controlling action of these drugs is exceedingly complex.

Small dose cortisone test for predicting future appearance of diabetes

Two years ago we reported to this committee that a National Institute of Arthritis and Metabolic Diseases grantee at the University of Michigan had suggested a method of determination of diabetes susceptibility. In families in which diabetes occurs, some members may be normal, some frankly diabetic, some show poor glucose tolerance although probably not diabetic, and a fourth group appear to be essentially normal in their responses to the glucose tolerance test unless they are given cortisone. Early studies had suggested that cortisone might tend to unmask a latent diabetes in those who have a family history of the disease but who show no diabetic signs in ordinary tests. The grantee has now completed a screening in 500 persons using the small-dose cortisone test he had suggested. The screening indicates that the test will provide an extremely reliable index of prediabetes. Of 259 apparently normal relatives of diabetics given the small dose cortisone test, one-fourth showed positive results. Followup of this latter group has revealed that 13 percent have developed diabetes and an additional 10 percent are classed as probably having diabetes; among negative reactors to the new test only 2 percent have developed diabetes. A 5-year followup is now planned from which final conclusions can be drawn.

Effect of training grants

Training grants are given not only in diabetes but also in arthritis, gastroenterology, metabolism, hematology, and physical biology. Their effectiveness in all of those fields can be illustrated by data for diabetes obtained by the American Diabetes Association.

The first national conference on teaching and research in diabetes was sponsored by the American Diabetes Association and the National Institute of Arthritis and Metabolic Diseases and was held at Atlantic City on May 3, 1958.

The extremely important role of the National Institute of Arthritis and Metabolic Diseases' training programs in strengthening diabetes education and research was brought out in the results of a questionnaire circulated by the Ameri-

can Diabetes Association to medical schools prior to the conference. The questionnaire, to which 85 percent responded, revealed that since 1954 an increase of 250 percent has occurred in the number of physicians receiving postgraduate clinical training in diabetes, and an increase of 300 percent in the number of postdoctorate diabetes research fellows. In the medical schools in 1954 diabetes training involved only two areas of medicine but in 1958 on the average involved eight areas of medicine. Seventy percent of the medical schools now give postgraduate medical courses in diabetes.

METABOLISM

As we have related to this committee in past years, one of the strongest efforts of this Institute is placed in the support of basic research in the biochemical or metabolic processes by which the body carries out its great number of tasks. These studies involve definition of the enzymes which catalyze biochemical reactions, investigation of the actions of the hormones which in considerable measure are believed to exert their effects by regulating enzymatic processes, and study of nutritional and other influences on the means by which the body obtains energy for growth and work. An extremely important aspect of metabolism research in recent years has been the investigation of diseases for the possibility that a defect or absence of a key enzyme (a defect transmitted under genetic influence) may be responsible for the disordered processes found; a number of these so-called molecular diseases have been found by our laboratories, such as, galactosemia, alcaptonuria, and congenital nonhemolytic jaundice. The search for others is involving ever more difficult studies since it is becoming evident that the remaining diseases of this type have biochemical defects that are far less obvious. The biochemical lesions probably involve not total enzyme lacks but relative deficiencies, enzyme warping or distortion, or a failure to produce needed extra amounts of an enzyme when a stress situation demands.

This aspect of metabolism places great importance upon the nucleic acids and nucleoproteins since they are at the heart of the processes by which cells and tissues genetically transmit from one generation to the next the capacity to produce distinctive and vital proteins, such as enzymes, hormones, and antibodies. Grantees and intramural investigators of the Institute are continuing important studies of the structure and mode of synthesis of nucleic acids.

Noted below are a few significant examples of developments in basic studies of metabolism.

Biochemical step found which helps explain why man cannot synthesize vitamin C

An unusual characteristic shared by man, monkey, and guinea pig is the inability to make within their own bodies ascorbic acid, or vitamin C, essential for the maintenance of connective tissue, bone, and teeth. Consequently, unlike other animals, man, monkey, and guinea pig must obtain vitamin C from food. Recently biochemists from the National Heart Institute and the National Institute of Arthritis and Metabolic Diseases for the first time isolated an intermediate breakdown product of glucose metabolism which plays a key role in the synthesis of vitamin C in those animals able to do so and thus were able to point more closely to the defect in vitamin C metabolism in man. In other mammals, a sugar, L-gulonic acid, is converted to ascorbic acid and xylulose, a five-carbon sugar or pentose: it was an intermediate in this conversion that was found and described for the first time. In man, however, only xylulose is formed, never any vitamin C. Occasionally a companion defect is also found in man whereby xylulose is not metabolized properly, accumulates and spills over into the urine to cause the condition known as pentosuria. This condition is not believed to be of serious clinical importance but pentose in the urine is occasionally mistaken for glucose and an incorrect diagnosis of diabetes made. Thus, these basic carbohydrate studies shed light both on the important nutritional element, vitamin C, and on the unusual disorder known as pentosuria.

Action of fibrinogen and thrombin in blood clotting revealed

Scientists in the Institute's laboratories have recently increased our understanding of how an important step in the blood clotting process actually works to halt the flow of blood. They have found, first of all, that thrombin is essentially a protein-splitting enzyme, very similar in structure to other proteolytic enzymes like trypsin which have long been well known for such action in other parts of the body. In the process of blood clotting, the enzyme thrombin has been found to attack the protein fibrinogen and to chop off two segments known as peptide chains. Physical chemical studies have indicated that these

two peptide chains have negative electrical charges so that in place of the fibrinogen molecule they help to repel neighboring fibrinogen molecules; once these chains have been cut off, however, when clotting is needed, the repellent action is eliminated and the remaining portions known as fibrin molecules clump together in the rubberlike mass of a clot. Even more recently, however, it has been determined that one of the severed peptide chains has a druglike action which causes the ends of severed blood vessels to constrict, an effect which would aid in the firm fixation of a fibrin clot. In this portion of the complex process of blood coagulation alone, three different kinds of action have thus far been demonstrated, enzymatic, physicochemical, and pharmacological, indicating the variety of techniques and talents required in any modern research project, even in one of relatively limited scope.

Nucleic acids

One of the most rewarding fields of basic research today appears to be that of the nucleic acids. Research progress has been made in the past year both by Institute investigators and by grantees. The major areas of progress have been in elucidation of structure, in the biosynthesis of these compounds and in the determination of their physiological role, particularly in the transmission of hereditary characteristics.

It is believed to be the nucleic acids and in particular deoxyribonucleic acid (DNA) which controls the development of complex organisms from the fertilized eggs—the differentiation of cells into organs and the developments of species and individual characteristics, thus providing for hereditary continuity. It is believed to be through defects in these nucleic acids that hereditary or familial diseases are transmitted—cystic fibrosis, galactosemia, susceptibility to diabetes and many others.

Employing bacteria and other simple organisms, investigators have shown that viruses may lie dormant through many generations, then either spontaneously or because of some external factor erupt into disease; and that viruses may carry genetic material from one host to another. Investigators have also made extensive progress in “mapping” of genes composed largely of DNA, i.e., in establishing which portions of the chromosome controls specific characteristics of the developing organism and in determining the nature of the abnormal chemical changes in the nucleic acids which result in hereditary defects.

These studies cannot be related to any given disease in man; in fact, predictions cannot be made as to which particular area this type of information will prove most important. Nevertheless, it can be stated with some assurance that the information derived from these studies will affect profoundly the whole future course of biological and categorical research.

PHYSICAL BIOLOGY

The National Institute of Arthritis and Metabolic Diseases is charged with the responsibility for developing the field of physical biology, that important research area which utilizes the principles and methods of the physicist in studies in biology. This responsibility has been discharged during the past year through notable increases in research grants and training grants and by additions to our intramural staff. At present there are 84 active research grants in physical biology. Nine training grants of considerable size have been awarded. Despite the relative newness of this area of activity, notable research progress has been made in such fields as the physical chemical behavior of macromolecules, energy reception and transfer in photosynthesis, coding and information theory, and the biological effects of radiation. Three examples follow.

Nature of molecular bonds studied by new physical biology techniques

The molecules of all proteins and of many other substances are held together by hydrogen bonds, many of which are forming and breaking thousands of times a second. Recent studies with new techniques indicate that large molecules are not always held together in straight lines but sometimes in a cyclical arrangement. This unusual finding in fine, molecular structure research has been made possible by an advanced electronic technique known as nuclear magnetic resonance. This technique involves placing the test substance in a strong and very stable magnetic field and bombarding it with radio waves; from the varying absorption of radio frequencies can be told the kinds of atomic particles present and precisely where they are located. An exact knowledge of molecular arrangements and bond shapes is of vital importance to

scientists interested in the structure of such important large molecules as the nucleic acids and the proteins, for example, insulin and fibrin.

Mathematical analysis speeds blood coagulation research

Studies of the blood coagulation process have recently pointed up the important contribution that advanced mathematics can make to the field of biochemistry. A biochemist-hematologist and a biomathematician have analyzed the reactions leading to the formation of two intermediates which appear when prothrombin is converted to thrombin, the enzyme which must be present in the blood before clotting can take place. Following up on previous work by the biochemist which had demonstrated the presence of an inhibitor of blood clotting in human plasma, the two men applied a combination of both experimental and mathematical analysis in which the mathematics not only proved the validity of the "working hypothesis" drawn from laboratory investigation, but provided additional conclusions which were later confirmed experimentally. It was shown, as a result, that the clotting inhibitor binds a product which is intermediate between prothrombin and thrombin, the amount of binding depending upon the rate of the prothrombin-to-thrombin reaction. Such a rate dependence tends to prevent slow clotting within blood vessels which might lead to dangerous thrombosis, but does not interfere with the rapid clotting necessary to stop hemorrhage from an injured blood vessel. The very complex problems of biological research today make the application of higher mathematics more and more important and necessary, for the research hypothesis often is removed from its experimental results by a long chain of deductions so that only by formalized mathematical analysis can the proper interpretation of results be made.

New instrument measures breathing resistance

Physical biologists in Institute laboratories have developed a new device for measuring airway resistance to normal and abnormal respiration and for determining air pressure within the lungs. The instrument, known as a whole body plethysmograph, has revealed some striking information concerning respiration. Employing the new research tool, the scientists found that oxygen uptake from the lungs into the bloodstream is a continuous process, one that goes on even while the lungs are motionless during breath holding. With the plethysmograph they have also shown that each heartbeat creates a negative pressure which brings air into the lungs, an event masked by normal respiration. Neither of these processes had been visualized previously. The new instrument initially will supply more basic information about the physiology of respiration; later it may find clinical use in evaluating therapy for asthma and other conditions involving increased lung airway resistance.

GASTROENTEROLOGY

In recognition of the importance of the gastrointestinal disorders, including peptic ulcer, ulcerative colitis, and regional ileitis, the National Institute of Arthritis and Metabolic Diseases has intensified its efforts in the support of basic and practical problems in this area.

Both research and training have been fully supported through the grant mechanism. At the present time there are 155 active research grants in this area and 25 training grants have been awarded. As a result of the interest and support of this committee and the active steps which have been taken by members of our staff and workers interested in the field, much more research and training activities are in progress than at any previous time. This accelerated activity is beginning to produce results, as evidenced by recent progress in our understanding of the malabsorption syndrome and in other areas. A modest beginning has been made toward our intramural research program in gastroenterology.

Progress in ulcerative colitis

Early last year under the joint sponsorship of the National Institute of Arthritis and Metabolic Diseases and the General Medicine Study Section, 70 basic and clinical investigators from various U.S. medical centers met to dissect and examine the disease problem ulcerative colitis. The conference, entitled "New Frontiers in Ulcerative Colitis," heard reports from nine senior research workers and resulted in evident stimulation of research interest. The most valuable discussion centered around (1) review of the tremendous variety of etiologic agents and mechanisms which have been suggested (infectious, neurogenic, and immunologic, most frequently) without conclusive evidence for any;

(2) the search for an experimental disease counterpart in animals; (3) the explosive advance in our knowledge of the viruses which inhabit the intestines (enteroviruses), in conjunction with which study of their possible relationship to ulcerative colitis has just been initiated; and (4) the delineation of distinctive biologic and psychologic features in the ulcerative colitis patients which suggests a characteristic personality structure and in turn the possibility of an inborn error of metabolism under genetic control as one necessary factor for susceptibility, other undetermined factors also being needed to develop the disease.

World Congress of Gastroenterology

Nearly 2,000 clinicians and investigators from 50 countries attended the World Congress on Gastroenterology held in Washington May 23-31, 1958. Host organization was the American Gastroenterological Association, whose president, Dr. Clifford J. Barborka, has been so instrumental in arousing interest in the problems surrounding this specialty. The meeting, substantially supported by a grant from the Institute, was most successful in providing those attending with worthwhile information, challenging concepts, and stimulating ideas. It also served to focus public attention upon gastroenterology.

Malabsorption: Gluten-free diet for the treatment of nontropical sprue

Relief from the disagreeable and deleterious symptoms of nontropical sprue has been brought this past year to many sufferers from this important gastrointestinal disease. This valuable therapeutic success was achieved by National Institute of Arthritis and Metabolic Diseases grantees who have devised an effective diet which is essentially free of wheat, rye, and oats. Nontropical sprue is probably the largest entity in the group of diseases known as malabsorption syndrome and is characterized by a long-lasting debilitating diarrhea, weakness, weight loss, and many other signs resulting from failure to properly absorb important nutritional substances. Working from earlier reports that gluten, one of the major fractions of cereal grains, might be the offending agent, the investigators first did metabolic balance studies on sprue patients and found that elimination of gluten from the diet increased absorption of fat and important minerals and permitted replenishment of body protein stores. Clinical trials were then employed and resulted in such a high rate of success that a gluten-free diet is now confidently recommended for the treatment of nontropical sprue.

CYSTIC FIBROSIS

It is estimated that perhaps as high a proportion as 1 in 1,000 children born in this country develop the serious familial disease cystic fibrosis. In recognition of the gravity of this situation, the Congress last year directed that a determined effort be made to plan a research attack upon the fundamentals of this disease, perhaps beginning with a scientific conference of the type which has proved so effective in other fields. The metabolic aspects of the research attack were entrusted to the National Institute of Arthritis and Metabolic Diseases, the infectious aspects to the National Institute of Allergy and Infectious Diseases.

The two Institutes, in collaboration with the National Cystic Fibrosis Research Foundation arranged for a 3-day conference of some 60 research workers, representing not only present interest in clinical and basic aspects of cystic fibrosis but representing also ancillary interests such as endocrinology, biochemistry, physiology, etc. This conference took place January 7, 8, and 9, 1959, and was eminently successful. Our present knowledge of the metabolic and infectious aspects of the disease was summarized and possible new approaches to an increased understanding of the basic defects underlying the disease were outlined and discussed.

As a further step in the accelerated attack upon this disease, we have undertaken the recruitment of a pediatrician with a very high degree of clinical competence and a special interest in cystic fibrosis in order to make available to him, as the leader of an intramural research team, our unique facilities at Bethesda. We believe that our search for such an individual has been successful, although the formal announcement of his appointment could not be made at the time of writing.

In addition, progress has been made in mounting a nationwide attack on this disease, as evidenced by increased requests for research and training support. It must be stated, however, that the effects of the increased availability of funds, of the conference, and of the concerted endeavors of the National Institutes of Health staff and of interested individuals throughout the country to stimulate increased research efforts, are just beginning to be felt. In the months and

years ahead we can confidently anticipate an accelerating effect from the impetus which has so recently been applied.

It is, of course, too early to report a great deal in the way of research accomplishments from our increased efforts. As a result of studies underway for some time, however, progress in our understanding of cystic fibrosis is being made. It can now be said that at least for mild cases with early diagnosis, the disease will not of necessity terminate fatally in early childhood.

We have also learned, as the result of studies which have been in progress, much more of the general nature of the disease; we know that we are dealing with a disorder which may affect all of the glandular, epithelial structures which have been studied—the bronchial tubes of the lungs, the pancreas, the gastrointestinal tract, the sweat glands, and even the tear glands. An important fact with regard to the genetic aspect of cystic fibrosis has evolved from the diagnostic test of sweat chloride in that with this test we can now recognize individuals who do not have the disease but are capable of transmitting it to the next generation. Finally, this past year a significant piece of fundamental information has been uncovered. The mucopolysaccharides of the intestines contain among other substances two unusual sugars, fucose and sialic acid. The ratio of these two sugars in a polysaccharide seem to determine its solubility. In the intestinal mucus from patients with cystic fibrosis has been found a highly insoluble polysaccharide, poor in sialic acid and rich in fucose, a physicochemical finding which might account for the tenacious nature of these secretions in cystic fibrosis patients. This discovery may be the first really important advance toward understanding the basic defect in the tissues of patients with this disease.

It is obvious that much remains to be accomplished. All of those interested are hopeful that the augmented attack on the disease will bear early fruit.

IMPORTANCE OF A BROAD RESEARCH ATTACK

Throughout the foregoing account of the activities and accomplishments carried on and supported by the National Institute of Arthritis and Metabolic Diseases may be detected instances where effective research in one field was made possible by advances and discoveries in another field, thus suggesting the value of avoiding too constricted an approach to the conquest of a particular disease. The importance of stimulating and supporting research along many fronts seems best illustrated by some important breakthroughs made possible by arduous efforts to advance broad fundamental knowledge. Most often these were basic studies in which at their inception and during the course of their development the investigators had no thought that their results would soon be useful in clinical disease, often a disease in a field quite distant from that of the basic research. Occasionally progress in one field has stemmed from a successful therapy in another field which carried an unwanted but provocative side effect.

Treatment of typhoid fever—discovery of the oral drugs for diabetes

In February 1957, a conference was held at the New York Academy of Sciences at which 33 scientific papers were presented summarizing the knowledge to that time of the clinical effects and mechanism of action of the oral drugs then known for diabetes. What circumstances led to the discovery of these drugs? Dr. Rachmiel Levine, distinguished carbohydrate chemist and physiologist, introduced the conference with the following words: "The present conference is a consequence of deliberate and well-planned research based upon a series of chance observations in a field far removed from diabetes. But for M. Janbon's fortuitous observation that one of the newer sulfonamides of 1942 produced a disorder very similar to hypoglycemia, August Loubatieres very probably would not have devoted the next 15 years to an effort to ascertain the nature of these symptoms and to analyze the mechanism which produced them. The sulfonylureas were originally designed as more soluble sulfa drugs with prolonged action, and their effects in diabetes were consequences of unexpected activity."

The investigator who first noted the blood sugar lowering effect which was to lead to these important drugs for the treatment of diabetes was working in an infectious disease clinic in a medical school in France. He was studying the therapeutic effect of a new derivative of sulfanilamide in patients with typhoid fever. He noted that this drug produced in some patients symptoms and signs resembling hypoglycemia. The chemical data revealed low values for blood sugar, and intravenous injection of glucose was helpful in alleviating

the symptoms in some patients. This unexpected circumstance was described to a colleague, Loubantieres, who had a long experience in experimental diabetes, and he set to work on the action of that sulfonamide, known as 2254-RP. From these studies eventually came in 1955 the first widely tested blood sugar lowering sulfonamide, BZ 55, and thence the present furious research activity on a variety of important antidiabetic compounds. Efforts directed at the chemical synthesis of a more effective antibiotic yielded a compound with a deleterious side effect which was then turned to useful effect in an entirely different disease.

Basic endocrinology—treatment of rheumatic diseases

This year marks the 10th anniversary of the first administration of a synthetic adrenal hormone, cortisone—with astounding success—to a patient with severe rheumatoid arthritis. This remarkable event would not have been possible without the painstaking efforts of a chemist, Edward C. Kendall, at the Mayo Foundation, to work out the various complex steps by which, starting with the cholesterol ring structure, certain hormones could be fabricated in the laboratory. This effort required several years and was originally inspired not from a planned effort to deal therapeutically with rheumatic diseases but from the realization that the adrenal cortex was able to make several hormonal substances which exerted delicate control of certain important body processes; the most evident of these processes was regulation of the excretion or preservation of the body's stores of salt and water.

These complex hormones are made in the body in such tiny amounts that study of their effects, of their manner of metabolic regulation, was seriously hampered. The only hope for obtaining them in sufficient quantity for successful study of their actions and function lay in synthesis in the laboratory, and this Kendall set out to do. Meanwhile the clinician, Dr. Philip Hench, was watching this work in basic endocrinology with interest. It had occurred to him, as it had to others, that some chemical regulator or hormone might yield a beneficial influence in rheumatoid arthritis; this thought was based on the clinical observation that during jaundice and pregnancy the painful and crippling aspects of arthritis abate. In jaundice and pregnancy some subtle changes in hormonal balance must occur, changes which even now are not yet defined. Finally, in 1948, when Kendall had completed his laboratory synthesis of compound E or cortisone, planned as a method for obtaining a better way of studying hormone action, Hench was able to take a small amount for administration to a patient with arthritis and with the gratifying results now so well known.

Although the principal result of this utilization of endocrine research in rheumatology has been great relief of suffering in patients, important byproducts have been the stimulation of much greater research in both endocrinology and rheumatic diseases. Particularly, studies have been pushed on the function of many other hormones and of the influence of hormones on various processes thought involved to varying degrees in rheumatic disease, on the synthesis and metabolism of collagen of connective tissue, on antibody production, and on inflammatory response to traumatic, bacterial, chemical, and hypersensitive stimuli, all as influenced by hormonal action.

Metabolic studies of adrenal insufficiency—diagnostic test for cystic fibrosis

Although a large number of investigators and alert physicians, beginning with Thomas Addison in 1855, have contributed a variety of important bits of information which have led to our present extensive knowledge of the adrenal glands, it was Koch and Harrison in 1933 at Columbia University Medical Center who demonstrated that patients with Addison's disease (adrenal insufficiency) and adrenalectomized dogs lose large quantities of sodium and chloride in the urine. Columbia has since been an important center for the study of adrenal disease, and the symptoms and signs of adrenal insufficiency have been particularly familiar to members of its medical staff. It is not difficult to understand, then, that when babies and children with the disease, cystic fibrosis or fibrocystic disease of the pancreas, were often brought to Columbia's Babies Hospital during a very hot summer in a state of collapse, it occurred to a young physician, di Sant'Agnese, that they appeared like patients with Addison's disease who had lost great quantities of salt and water. Being familiar with the tests for the adrenal disease, di Sant'Agnese tested the blood and found it low in sodium and chloride in these seriously ill young patients. Unlike Addison's disease, however, the route of excessive salt loss was found not to be by way of the kidneys but by way of the sweat glands. Further study of sweat chloride and sodium in a variety of diseases revealed that only in cystic fibrosis was there

an abnormally great excretion of salt in the sweat. Thus was devised the specific and now widely used diagnostic test for cystic fibrosis.

Rheumatic disease—endocrine studies of mucopolysaccharides, adjunct to the therapy of galactosemia

Within the past year investigators in our Institute laboratories have been studying the effects of endocrine hormones upon various tissues and metabolites important in rheumatic disease; they have noted that certain hormones play an essential role in the metabolism of joint tissues studied in the test tube and of certain sugars essential to the structure of mucopolysaccharides in connective tissue. One of these sugars, fucose, it was realized, is structurally closely related to galactose, the milk sugar which is inadequately metabolized or used for energy by a child with galactosemia. It was decided, therefore, to subject galactose to similar studies of hormonal influence.

By detailed metabolism experiments involving labeling the sugar with radioactive carbon and measuring the radioactive carbon dioxide released when hormones are added, it was found that three hormones greatly increased the metabolism of galactose; it was further determined that this increase in metabolism does not occur through stimulation of the action of any of the known enzymes or protein catalysts in the known galactose metabolism pathway, strongly suggesting that a new and different pathway for utilizing galactose must exist upon which the hormones exert their stimulation.

The studies now shifted from the discipline of biochemistry to that of physiology, the study of function, with particular emphasis on the hormone progesterone, since of the hormones active on this process it alone is virtually free of harmful side effects. First the scientists were able to show in rats that the formation of galactose cataracts could be retarded by progesterone; rats fed excessive quantities of galactose develop cataracts of the eye just as do patients who have the natural disease. Finally, one of the investigators being a clinician, turned to the study of a galactosemic patient and demonstrated that administration of progesterone would bring about metabolism of galactose. Further studies are planned to determine more definitively the place of progesterone as an adjunct to the treatment of this serious, congenital disease.

These barely completed investigations in our own laboratories illustrate that the principle of application of the studies on one field to those of another are not isolated accidents of the past but may occur at any time. The astute investigator must not be restricted in his point of view or a valuable opportunity may go unnoticed.

CONCLUSION

As can be seen from the foregoing, the past year has witnessed important advances in almost all of the areas of responsibility of this Institute. Improvements are steadily being achieved in the treatment of specific diseases such as rheumatoid arthritis, gout, and diabetes. In addition, and even more important, there has been accumulated much new basic knowledge which from past experience will inevitably be of eventual value in some now unpredictable area of categorical interest.

BUDGET REQUEST

Dr. DAFT. Mr. Chairman, the 1960 budget request for arthritis and metabolic disease activities which is before you is for \$31,215,000, which is the same as the amount appropriated for 1959, but \$57,000 greater than the 1959 obligation plan.

The past year has been a particularly significant one, with important advances in almost all areas of the Institute's responsibility. The newer programs are developing rapidly and, we believe, soundly.

RESEARCH PROGRESS

A great many examples of research progress could be cited. Of particular interest, perhaps, are the development at Bethesda of a new synthetic painkilling drug more powerful than morphine; the clinical testing of promising new drugs for rheumatoid arthritis and gout and progress in our understanding of these and related diseases; observations on oral drugs for diabetes including some new, more

powerful compounds; further progress in the elucidation of the mode of action and the valuation of these oral drugs; further progress in the development of a test for predicting the future appearance of diabetes; and a series of achievements in basic research, notably in the biosynthesis and the elucidation of the metabolic role of the nucleic acids and in the determination of the precise mechanisms involved in the protection of the body against blood loss.

NEW PAINKILLING DRUG

Senator HILL. Speaking about this new painkilling drug, have you had that long enough to know as to the effects in relation to those that you get from morphine? I mean not only from the standpoint of killing the pain but the other effects? How habit-forming it might be? Some people cannot take morphine on account of nausea. How about this drug?

Dr. DAFT. Well, we have considerable experience with the drug now. It has been given to some 2,000 patients.

Senator HILL. 2,000 patients?

Dr. DAFT. Yes. It has been given in the recovery room where it is seen to be probably more effective than morphine. It does not seem to have any very serious side effects. There is respiratory depression when they give adequate amounts of morphine which does not appear with this new drug.

Another very good feature of the drug which is just coming out at the present time is the fact that apparently it can be given satisfactorily orally while morphine, of course, has to be injected.

Senator HILL. Yes.

SUCCESS IN ORAL ADMINISTRATION

Dr. DAFT. Now most of the work so far with this new drug has been done by injection because we took it for granted at first that it could not be given orally. But the recent work has shown that it is effective orally.

A great deal more work must be done with it, given in this way. Now this matter of addictive qualities, those tests are underway, and we have some preliminary tests that suggest that it is less addicting than morphine. It definitely is an addicting drug. We are certain of that.

It is a question yet of how addicting the drug is. Those tests are going on at Lexington now. There is due a report very soon on the first series of tests. But even when these are completed in the very near future, other series of tests will have to be carried on before we can be sure just how addicting this drug is.

METHOD OF DISCOVERY

Senator HILL. I would be interested to know how did you find this drug?

Dr. DAFT. Well, sir, we have been working in this area—our chemists have been working in this area for some 15 years. Well, more than 15 years. It started at a period when we wanted to develop drugs so that we would be free from the importation of morphine.

There was a very serious situation at that time in regard to young addicts. And they wanted to develop drugs in this country which can

be controlled very carefully. A series of drugs have been developed over the years, each of them having some promising characteristics. Actually in regard to this particular drug we reported to you last year just very casually that this drug had been discovered and was under testing. But we did not know at that time that it had very many of its very desirable characteristics that we now see that it has.

So that only as time went on have we realized that we have a very good drug, as good as it really is. We developed a number over the years.

Dr. SHANNON. Senator Hill, could I comment on this program?

Senator HILL. Certainly.

Dr. SHANNON. I think it is illustrative of so many of the programs that are soundly based on research looking toward the future.

This program was actually started by a chemist by the name of Lyndon Small before World War II, who incidentally died of cancer of the larynx about a year ago. He interrupted his studies on morphine substitutes during World War II, and devoted himself to the development of antimalaria drugs.

He returned to them subsequent to World War II. So, I would say that this advance, although very striking in terms of work, has occupied a senior scientist, with such support as we could give him, probably about 15 years. And as Dr. Daft points out, one of the tremendous advantages is that it frees us from this need to import morphine.

Dr. DAFT. In that regard, I might add that we are told by Mr. Anslinger of the Narcotics Bureau that there is a potential shortage of morphine. So this comes at a particularly good time so that we will be freed in this way from the importation of morphine.

Senator HILL. Fine.

DRUG FOR DIABETES

You speak about the old drugs for diabetes; as I recall last year we earmarked some half million for this purpose.

Dr. DAFT. That is correct. We have made progress in this area. The progress has been somewhat less rapid than we would have liked. Now our work has gone along on two general lines in relation to oral drugs. One of them has been to determine the mode of action of the drugs. This is very important because the usefulness of the drugs really depend on their mode of action.

If they merely eliminated sugar from the blood and urine in a method which was not beneficial to the patient, then they would not be very useful drugs to be sure. So, it is very important for us to find out exactly how they are acting.

Also we are very anxious to get a thorough evaluation of the drugs over long periods in order to make certain that they do prevent as well as insulin the development of the complications which come over the years with diabetes.

COLLABORATION WITH VETERANS' ADMINISTRATION

We are collaborating with the Veterans' Administration on such a study. We are doing some parts of it at Bethesda. And the Veterans' Administration, through their hospitals, are studying a great number of patients. There is a place in this area for other studies than the Veterans' Administration studies.

And we are getting such studies started. But they have not developed these others quite as rapidly, as I have said, as we had hoped. There is a group, however, of our training grant directors who are people who are dealing with a great number of patients with diabetes through their hospitals, who are getting together and are bringing to us a proposal for a long-term study which will be complementary to the one carried on by the Veterans' Administration.

And I believe with those two and a few other studies that are being developed we will do what the committee asked us to do last year, which was to get a long-range evaluation of the effects over long times of the drugs.

Senator HILL. In other words, you have made progress toward that end this year?

Dr. DAFT. Yes, sir, we have made progress. And I think during next year we will make much greater progress in getting the type of study started which should give us the answers in this area.

INTERNATIONAL ASPECTS OF PROGRAM

It is timely to report also that the international aspects of our programs are developing steadily and significant advances are being made in our collaborative studies in Peru on burns and burn shock, our collaborative work on nutrition throughout the world, our new programs in geographic disease studies, and our sponsorship and participation in many important international conferences and symposia.

Senator HILL. Doctor, you may have gone into this in the past, but I would like to have my recollection refreshed. What was the motivation of going into the collaborative studies in Peru? Why was that particular place selected. I would be interested to know that and to have the record show it.

Dr. DAFT. Yes, Senator Hill. The studies in Peru are in the general area of burn shock. This was a study undertaken by one of our scientists at Bethesda during the war on methods of protection against shock. He was working with small animals and was able to show that salt and soda by mouth would protect animals which otherwise would die of shock, whether the shock was due to burn or injury and to a certain extent due to blood loss.

The results were so very striking in the small animals that it was apparent that this should be tested out in humans as well. There were a few studies made in this country. But quite naturally if there were a very sick patient and since plasma is always available in this country, then naturally plasma could not be withheld because it was known that this was a lifesaving procedure.

So, we needed very badly to find a place to evaluate the use of salt by mouth where plasma was not readily available. And such a place was Peru. They have a great many serious burns, particularly among the women and children, because they use gasoline as a source of fuel for heating and for cooking both. Also plasma was very expensive, and in their general treatment of shock was not used at all. So, this gave us an opportunity to set up a study where we could compare the treatment which they had been receiving over the years in Peru with the treatment by salt and soda.

I might say that we were never able to finish that study, because after a year, before we really had determined statistically that this was a good method, it had so convinced all of the doctors in Lima

that we were no longer—none of us wanted to continue exactly along this line.

ORAL SALT AND SODA FOR BURN SHOCK

So the study took a slightly different turn. And we compared, then, adequate plasma with oral salt and soda and found that they were very nearly equal in their ability to save lives from burn shock.

The next aspect of the study which has now been almost completed is a study of the combination of salt and soda by mouth and plasma as compared to either one alone. And it appears from the preliminary results as though the combination might be a little better.

There was, however, one thing which developed which might be of interest to you. Although these children were saved from burn shock, a very large number of them, after the use of either the plasma or the salt or soda, in either case there was a very high late mortality in the children, much higher than should have occurred according to similar studies in this country.

And very many studies were made of this condition to try to determine what was happening, what was responsible for the late deaths.

INJECTION FOLLOWING SHOCK

It was found that all of them died with a blood infection due to one particular organism called pseudomonas. We tried antibiotics. We found that most antibiotics would not combat this particular infection; so, the problem was then brought back to our laboratory in Bethesda and studied again on small animals. And it was found that by subjecting the animals to a method which resulted in shock such as burning, they then became susceptible to infection with this organism. Or they could be given cortisone. And this also made them susceptible to the infection.

This gave us an opportunity then to study preventive measures for saving the animals from this infection. And it was possible to save them with a fraction of human blood, human gamma globulin.

Even more, we were able to develop a particular antibody preparation which was even more effective in saving animals. Now, this study was then ready to return to the children in Lima; and we are in the process of making a rather extensive study of protecting the children against late death from burns. It looks hopeful. But the study is not completed as yet.

Dr. PORTERFIELD. May I add a remark, Mr. Chairman?

Senator HILL. Certainly, Doctor.

IMPACT OF RESEARCH STUDIES IN BURN SHOCK

Dr. PORTERFIELD. It was my good fortune to be in Lima, Peru, in February of this year. I went over to the Childrens Hospital and saw the ward and the physician in charge. And I would like to add, in addition to what Dr. Daft has told you about the progress of the research studies, that this has had a great impact on the physicians and patients in the hospital and the resident staff of the hospital.

The young medical officers that were taking their residency have all become so interested in this that there is competition to work in the laboratory that backs up this ward locally.

I think it is doing much more in the way of training and developing good relations above the research value.

Senator HILL. In other words, the overall result is so encouraging, so good?

Dr. PORTERFIELD. That is right.

Senator HILL. Thank you.

STUDIES IN OTHER DISEASES

Dr. DAFT. Programs are developing satisfactorily in gastroenterology, including peptic ulcer, ulcerative colitis and ileitis, in cystic fibrosis and in physical biology.

Senator HILL. What do you do in connection with kidney diseases?

Dr. DAFT. We have very few studies going on by our grantees or ourselves on kidney diseases.

Now, in the Heart Institute there are, of course, a great number of studies supported and going on at Bethesda in the general area of kidney disease related to heart disease. Perhaps Doctor Shannon could tell you better than I of those studies.

Dr. SHANNON. Yes.

RESEARCH ON KIDNEY DISEASES

This is an area that by administrative allocation is given to us as our responsibility. There is a whole array of studies being conducted both internally and in the grant program that have to do with the normal function of the kidney in relation to the normal maintenance of the interior body, systematic study of pyonephrosis, nephrosis, and the like.

So that we have concentrated in that one institute this entire area of study. If you would like, sir, I could have prepared a summary of the general types of work that are incorporated in the program.

Senator HILL. Fine. If you would do that, that would be very fine.

When I asked about kidney diseases, too, Doctor, I was thinking particularly about kidney stones. Are you doing anything on that?

Dr. DAFT. We do have some fundamental projects going on on kidney stones of certain types. They are appearing in our germ-free animals. That this gives us an excellent method of studying certain types of kidney stones there.

We have a visitor from Sweden who is particularly interested in this problem. In other areas of kidney stone, I think we have some studies going on.

Dr. SHANNON. You have some going on in addition in your study of gout. Kidney stones are due to two broad causes; one is a metabolic defect; the other is infection where the infection itself focuses around this deposit of minerals that develops.

So I would say there is no systematic study on that. It is being approached primarily from the fundamental causes which result in kidney stones rather than a study of kidney stones themselves, part of this being in the Heart Institute, and part being in Doctor Daft's institute.

Senator HILL. In studying these fundamental causes, you feel like you are doing a lot toward it?

Dr. SHANNON. We think so.

Senator HILL. The stone is the effect?

Dr. SHANNON. The stone is the end result of the causes.

Senator HILL. And you are studying these causes?

Dr. SHANNON. Yes, sir.

Senator HILL. All right; go ahead, Doctor.

WORK UNDER HOUSE INCREASE

Dr. DAFT. The House Committee on Appropriations, in acting on the appropriations for the Department of Health, Education, and Welfare for 1960, increased the President's budget by \$6,575,000 for arthritis and metabolic disease activities. As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee, the following statement is submitted in explanation of how this increase, if enacted, would be applied.

ACTIVITY NO. 1 (a)—RESEARCH PROJECTS

The full amount requested of \$18,898,000 was allowed by the House. In addition, the House provided \$5,198,000 for new research projects such as physical biology, gastroenterology, cystic fibrosis, arthritis, and diabetes. This is an increase of \$5,447,000 over the 1959 appropriation.

ACTIVITY NO. 1 (c)—TRAINING

The full amount requested of \$4,435,000 was allowed by the House. In addition, \$863,000 was provided for training in areas such as physical biology, gastroenterology, and diabetes.

ACTIVITY NO. 2 (a)—RESEARCH

The full amount requested of \$6,837,000 was allowed by the House. In addition, 18 positions and \$432,000 was provided for direct research in gastroenterology and epidemiology, physical biology, and geographic disease studies, and for the replacement of the elevator in building 4. The increase also provides \$97,000 for reimbursement to the National Institutes of Health management fund. This represents a net increase over the 1959 appropriation of \$201,000.

ACTIVITY NO. 2 (b)—REVIEW AND APPROVAL OF GRANTS

The full amount requested of \$546,000 was allowed by the House. In addition, 5 positions and \$74,000 was provided for the expanded grants program, including \$29,000 for reimbursement to the National Institutes of Health management fund. This is an increase of \$113,000 over the 1959 appropriation.

ACTIVITY NO. 2 (c)—ADMINISTRATION

The full amount requested of \$162,000 was allowed by the House. In addition \$8,000 was provided for reimbursement to the National Institutes of Health management fund.

May I add that for overall budgetary consideration, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

Senator HILL. We appreciate that, Doctor. But it would be your professional judgment, would it not, that these increases could be effectively expended?

Dr. DAFT. Yes; my professional judgment would dictate that they could be very effectively spent.

Senator HILL. Anything else you would like to add, Doctor?

Dr. SHANNON. No, sir.

Senator HILL. We are very much obliged to you.

Dr. SHANNON. Mr. Chairman, we have another president here. Doctor Daft is the incoming president-elect of the American Institute of Nutrition which is one of the main societies of the American Federation of Biological Science. And we also in the Institute have at the present time the past president of the American Rheumatism Society. So, I thought while you are looking at presidents, I might mention that.

Senator HILL. We want to congratulate Doctor Daft, and I would like to say I am proud of you.

ALLERGY AND INFECTIOUS DISEASE ACTIVITIES

STATEMENT OF DR. JUSTIN M. ANDREWS, DIRECTOR, NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES; ACCOMPANIED BY DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“For expenses, not otherwise provided for, necessary to carry out the purposes of the Act relating to allergy and infectious diseases, \$24,071,000, of which \$150,000 shall be available for payment to the Gorgas Memorial Institute for maintenance and operation of the Gorgas Memorial Laboratory.”

Amounts available for obligation

	1959 appropriation	1960 budget estimate	1960 House allowance
Appropriation or estimate	\$24, 071, 000	\$24, 071, 000	\$30, 286, 000
Deductions: Unobligated balance, estimated savings.....	—25, 000	0	0
Total obligations	24, 046, 000	24, 071, 000	30, 286, 000

Obligations by objects

Object classification	1959 appropriation	1960 budget estimate	1960 House allowance
Total number of permanent positions.....	557	557	590
Full-time equivalent of all other positions.....	4	4	4
Average number of all employees.....	545	545	572
Number of employees at end of year.....	547	547	574
01 Personal services.....	\$3, 439, 200	\$3, 448, 700	\$3, 603, 800
02 Travel.....	75, 400	75, 400	83, 000
03 Transportation of things.....	40, 000	40, 000	42, 000
04 Communication services.....	30, 000	30, 000	30, 000
05 Rents and utility services.....	32, 000	32, 000	32, 000
06 Printing and reproduction.....	2, 000	2, 000	2, 000
07 Other contractual services.....	238, 000	243, 000	425, 900
Reimbursement to "National Institutes of Health management fund".....	2, 231, 000	2, 296, 000	2, 405, 000
08 Supplies and materials.....	575, 000	585, 500	606, 800
09 Equipment.....	180, 000	180, 000	309, 600
11 Grants, subsidies, and contributions.....	17, 052, 000	16, 987, 000	22, 584, 000
Contribution to retirement fund.....	145, 100	145, 100	154, 900
13 Refunds, awards, and indemnities.....	1, 500	1, 500	1, 500
15 Taxes and assessments.....	12, 000	12, 000	12, 700
Subtotal.....	24, 053, 200	24, 078, 200	30, 293, 200
Deduct quarters and subsistence charges.....	7, 200	7, 200	7, 200
Total obligations.....	24, 046, 000	24, 071, 000	30, 286, 000

Obligations by activities

Description	1959 appropriation		1960 budget estimates		1960 House allowance	
	Posi-tions	Amount	Posi-tions	Amount	Posi-tions	Amount
Grants:						
(a) Research projects.....		\$14, 438, 000		\$14, 438, 000		\$19, 136, 000
(b) Research fellowships.....		866, 000		801, 000		866, 000
(c) Training.....		1, 787, 000		1, 787, 000		2, 621, 000
Direct operations:						
(a) Research.....	526	6, 501, 000	526	6, 577, 000	548	7, 095, 000
(b) Review and approval of grants.....	20	304, 000	20	317, 000	27	390, 000
(c) Administration.....	11	150, 000	11	151, 000	15	178, 000
Total obligations.....	557	24, 046, 000	557	24, 071, 000	590	30, 286, 000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	557	\$24, 071, 000
Deduct unobligated balances, estimated savings.....		—25, 000
1960 base.....	557	24, 046, 000
1960 appropriation request.....	557	24, 071, 000
Net change requested.....	0	25, 000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Decreases:				
Research fellowships.....		\$65, 000		\$65, 000
Subtotal decreases.....		65, 000		65, 000
Increases:				
For mandatory items:				
Extra day's pay (261 days in 1959 and 262 days in 1960).....		8, 900		8, 900
For program items:				
Research projects for fulfilling needs in allergy and immunology, cystic fibrosis, staphylococcal, virology, tropical diseases, and vaccine development.....				4, 698, 000
Research fellowship program.....				65, 000
Research training grants for allergy, immunology, tropical medicine, and parasitology.....				834, 000
Direct research expansion in:				
Germ-free.....		16, 100		101, 100
Allergy and immunology.....				75, 000
Arbor virus and microbial physiology.....			5	145, 000
Cell biology.....			6	50, 000
Parasitic diseases.....				18, 000
Rocky Mountain Laboratory.....			11	66, 000
Review and approval of grants.....			7	49, 000
Administration.....			4	21, 000
Net change in reimbursement to "National Institutes of Health management fund".....		65, 000		174, 000
Subtotal program increases.....		81, 100	33	6, 296, 100
Total change requested.....		25, 000	33	6, 240, 000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$6,215,000 for allergy and infectious disease activities. As the Secretary indicated this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Activity No. 1(a)—Grants for research projects

The full amount requested of \$14,438,000 was allowed. In addition the House approved an increase of \$4,698,000 over the amount requested in the fields of allergy and immunology, cystic fibrosis, staphylococcal, virology, tropical diseases, and vaccine development.

Activity No. 1(b)—Research fellowships

The full amount requested of \$801,000 was allowed. In addition the House approved an increase of \$65,000 for predoctoral, postdoctoral and special fellowships. The total House allowance is the same amount as the 1959 appropriation.

Activity No. 1(c)—Training grants

The full amount requested of \$1,787,000 was allowed. In addition the House approved an increase of \$84,000 over the amount requested in the general fields of allergy and immunology, tropical medicine and parasitology, and microbiology.

Activity No. 2(a)—Research

The full amount requested of \$6,577,000 and 526 positions was allowed. In addition the House provided 22 new positions and \$518,000 for alterations and renovations of space and equipment purchases for the following areas of research: Allergy and immunology, virology, germ-free research, microbial physiology, and research at the Rocky Mountain Laboratory. The total House allowance is an increase of \$594,000 over the 1959 appropriation.

Activity No. 2(b)—Review and approval of grants

The full amount requested of \$317,000 and 20 positions was allowed. In addition the House approved an additional seven positions and \$73,000 over the amount requested to support the expanded program of processing research projects, research fellowships, and training grants. The total House allowance is an increase of \$86,000 over the 1959 appropriation.

Activity No. 2(c)—Administration

The full amount requested of \$151,000 and 11 positions was allowed. In addition the House provided four positions and \$27,000 for expanded administrative needs in the Office of the Director. The total House allowance is an increase of \$28,000 over the 1959 appropriation.

For overall budgetary consideration, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

PREPARED STATEMENT

Senator HILL. The next is Doctor Andrews, Director, National Institute of Allergy and Infectious Diseases.

Doctor, you have a statement and a summation, do you, sir?

Dr. ANDREWS. Yes, sir; I have a statement which I would like to submit for the record and summarized if I may.

Senator HILL. That will be fine.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES, PUBLIC HEALTH SERVICE, ON ALLERGY AND INFECTIOUS DISEASES ACTIVITIES

Mr. Chairman and members of the committee, the infectious disease activities at the National Institutes of Health evolve from the earliest Public Health Service research. Allergy-immunology studies were assigned in 1956 as additional program responsibilities, and the Microbiological Institute became the National Institute of Allergy and Infectious Diseases.

The microbiological approach underlies many of the dramatic and life-saving advances of modern medicine and has provided a position of strength from which to attack chronic disease problems. This approach remains fundamental to the work of the National Institute of Allergy and Infectious Diseases and to the progress of medicine. The 1960 budget proposal for this appropriation is \$24,071,000 which is the same as 1959, but \$25,000 greater than the 1959 obligation plan.

RESEARCH TRAINING

Perhaps the most encouraging development in the present year has been the growth of the Institute's graduate training grants program. Initiated last year, the program provides grants for the support of special training in fields of critical scientific manpower shortage, in allergy-immunology and in tropical medicine and parasitology.

The training program this year was extended to include grants in general microbiology, a central discipline for the entire field of biology and medicine as well as for infectious and allergic diseases.

This development brings to a close a period which has witnessed a gradual deemphasis of microbiology over the last 10 to 15 years. As a result, the teaching of microbiology in the Nation's universities and in medical schools has seriously suffered and the training of infectious disease specialists has been largely neglected.

What this has meant to the practice of medicine is reflected in the following observation made by a noted microbiologist in the course of a discussion on the kind of medical care now available to anyone who develops a serious infection. If he himself were confronted with this problem, the scientist said, he would be inclined to seek out a pediatrician or a veterinarian, the two specialists who still spend comparatively large amounts of time thinking about and treating infections.

This paucity of skills and experience needed to diagnose and treat human infectious diseases is illogical in view of our knowledge that most of man's infectious experiences are still occurring, and that what we have witnessed in the past decade is merely a decline in the mortality and, to a less extent, the morbidity of the more severe infections. Even here we are daily reminded of how easily such gains can be reversed. This is all too evident in the field of staphylococcal infections, where the emergence of antibiotic-resistant strains now constitute the gravest problem confronting our hospitals. As physicians and health departments can testify, the same is rapidly becoming true of gonorrhea, the control of which is threatened by the development of penicillin-resistant strains of gonococcus.

The broad significance of microbiology in the whole field of medicine and biology has been obscured in recent years by the emphasis placed on categorical disease programs. This is indicated, for example, in the character of medical science information which reaches the general public. For the most part, this is chronic disease-oriented and reflects little of the excitement and challenge, the opportunities and contributions of microbiologic research. Surprisingly few clearly understand where microbiologists fit into the picture and why their skills are vitally needed to study infectious disease processes and to uncover the promising leads for the study of cancer, heart disease, neurologic afflictions, and other health impairments not usually associated with infection.

From the time of Pasteur, microorganisms such as bacteria, yeasts, and molds have been recognized as agents of disease in plants and animals and as the catalysts of important beneficial processes in nature. The microbiologists, therefore, have always been interested in the life processes of microorganisms and their interrelations with plants and animals. They seek to determine how microorganisms utilize various nutrients for energy for the elaboration of new cells. One branch of microbiology is concerned with smaller agents of disease such as viruses: How they invade living cells, multiply within them, and eventually destroy them.

From such studies have come important practical advances such as the antibiotic drugs and preventive vaccines for diseases such as poliomyelitis. Possibly more important from the long-range standpoint is the use of microorganisms as models for the study of the mechanisms by which all cells, including normal and malignant human cells, function.

In view of the relative neglect of microbiology for some years, it is not surprising that the demand for well trained specialists in this field today far ex-

ceeds our meager supply. This is reflected, along with other teaching deficits, in the annual report on medical education in the United States and Canada, which includes an analysis of the budgeted, unfilled full-time faculty positions in the medical schools in the United States.

Commenting editorially on this report, the *Journal of the American Medical Association* recently pointed out that the total number of unfilled full-time faculty positions in the basic and clinical sciences rose to 619 during 1957-58, an increase of about 90 percent over the previous year. This, states the *Journal*, "presents a problem of major concern to medical education. Its magnitude, unless the trend is reversed, has developed to the point where it may jeopardize certain aspects of medical education, research, and care in the period that lies ahead."

This deficit in teaching and research training will not be easily overcome. But the graduate training grants program initiated by this Institute represents a sensible step forward. Nowhere is this more urgently needed than in the basic sciences represented by microbiology.

UPPER RESPIRATORY DISEASE

During a 1-year period ending in June 1958, the National Health Survey reported 284 million acute respiratory illnesses (such as influenza, the pneumonias, and "colds") in the population of the United States. These conditions involved disability or medical attention. In the aggregate they represent a cost in billions to industry through absenteeism and lowered productivity, a sharp reduction in the effectiveness of our schools, and a \$3 billion medical bill.

For some years this Institute has played a major role in uncovering viruses associated with respiratory and other illnesses, studying their prevalence and their characteristics, and investigating possibilities for immunizing against them. Research by the Institute and the military culminated in an adenovirus vaccine which was shown to reduce respiratory disease in military recruits. During the past year, our virologists have applied essentially the same methods in characterizing the newly recognized hemadsorption viruses. They demonstrated that these agents are prevalent in children at certain seasons and that the virus will cause respiratory illness when given to adult volunteers. The laboratory is now working on the development and trial of a hemadsorption virus vaccine to immunize against these prevalent respiratory disease agents.

New knowledge of the microbial experiences of young children is unfolding in a long-term study at the Junior Village nursery of the District of Columbia by Institute epidemiologists and virologists. They are observing the exchange of infections in a study group of approximately 60 youngsters between the ages of 6 months and 3 years. As a result of the introduction of new disease agents by incoming children, and of new children to the existing agents in this group, there is much minor illness throughout the year.

Data gained from this and other epidemiological studies should be helpful in the development of prophylactic vaccines. Whether immunization will prove practical depends upon factors such as (1) discovery and characterization of previously unrecognized agents, (2) determination of which are important pathogens, and in which population groups, (3) development of vaccines for use against viral diseases important to certain groups, (4) combination of several types of important viruses in a single vaccine, and (5) general use of some of these "polyvalent" vaccines to reduce illness in the general population.

Virologists are now able to account for about half of the formerly undifferentiated respiratory diseases. Still to be defined are the obscure causes for the remaining common colds, bronchitis, grippe, atypical pneumonias, and other respiratory infections.

Looking back on our experience last season with Asian influenza, it is worth pointing out that this was the first time that the occurrence of influenza epidemics had been predicted with reasonable certainty. This achievement was made possible by knowledge gradually assembled by many investigators through 25 years of research following isolation of the influenza virus in 1933.

The knowledge made it possible quickly to develop and make commercially available Asian strain vaccine. Undoubtedly, this biologic greatly reduced the impact of the disease upon the people of the United States.

A study undertaken by Navy scientists with our participation was reported recently, among a number of investigations that indicated considerable effectiveness of the Asian influenza vaccine in preventing naturally occurring influenza. The results in 3,355 Navy recruits showed an 83 to 90 percent reduc-

tion in febrile respiratory disease was associated with prior inoculation with the vaccine.

However, millions in our general population were afflicted. Approximately 78,000 deaths were attributed to influenza—many of them involving pregnant women or heart conditions.

The specter of outbreaks such as the influenza pandemic of 1918–19, which took an estimated 20 million lives throughout the world, continues to give impetus to influenza research during interepidemic periods. The Institute plans to maintain and extend research on this and other viral respiratory diseases during coming years.

In addition to its own virus studies, the Institute expects to spend in 1959 over \$3 million on virus research through grants-in-aid. Respiratory involvement in virus infection and basic studies of virus-cell interaction represents the major, although by no means the entire emphasis of this research.

STAPHYLOCOCCAL INFECTIONS

This Institute is deeply concerned with the problem of staphylococcal disease. The causative agent is a common microbe that has become resistant to most of the new drugs discovered in the past 20 years and is now the cause of serious epidemics in many hospitals.

Although recognized principally as a problem of morbidity, a recent sampling indicates the death rate from this disease is appreciable. In a survey of one large hospital it was found that over 15 percent of the patients had "staph" infections, most of them acquired after admission. In a survey of several thousand death certificates, the National Office of Vital Statistics found evidence that 3,000 to 5,000 fatalities directly or indirectly may be traced to staphylococci each year in the United States.

Recognizing the need for an accelerated research effort in this area, the National Institute of Allergy and Infectious Diseases last August participated in a broad interstudy section meeting aimed at clearly delineating the more urgent research needs in this area. In September the U.S. Public Health Service and the National Academy of Sciences cosponsored a National Conference on Staphylococcal Disease to which the Public Health Service Communicable Disease Center was host. These conferences underlined the meagerness of fundamental information about staphylococcal disease and the great need for further research. Lacking better knowledge, the hospitals have had to return to older techniques of asepsis and more rigid controls over therapeutic regimen. These measures are effective in an emergency but any true solution will have to await extensive drug evaluations, studies of the basic biology of microbial resistance and host response, clarification of the role of the carrier, and more adequate epidemiologic data.

While the Institute is emphasizing its direct research effort in this area, it is simultaneously sponsoring an increased grants program. Congress last year indicated special concern over the rising incidence of staphylococcal illness by making available \$1 million for this research, a fivefold increase over 1958 levels. These funds are being employed by university and medical center scientists in diverse studies of the physiological, biochemical, and genetic bases of microbial resistance to drugs; on staphylococcal host-parasite relationships; on the nature of virulence of this organism; and on the epidemiology of hospital-acquired infections.

Apparently control of drug resistance will unavoidably involve the most judicious use of antibiotics in hospitals.

CYSTIC FIBROSIS

Although cystic fibrosis has been recognized as a disease entity for just 20 years, it has now become the second most common post-mortem diagnosis in children's hospitals in the United States. Nevertheless, the difficulties of diagnosing this disease in young infants not in hospitals makes current reporting and enumerating of cases unreliable. In view of its growing importance, the disease is receiving joint research support by the National Institute of Allergy and Infectious Diseases and the National Institute of Arthritis and Metabolic Diseases.

Children with this disease have marked susceptibility to pulmonary infection, particularly with staphylococcal organisms. Because of the critical importance

of infections in these patients, the major effort in the Institute's clinical program is directed toward investigation of factors responsible for this increased susceptibility.

Congress has appropriated additional funds for the present fiscal year in the grant-supported area to expand research on cystic fibrosis, thus enabling the grantees to attack many more of the complex problems associated with this disorder. Certain of these forthcoming studies will investigate clinical, biochemical, and genetic aspects of this disease. Answers in this area may provide a sound basis for eventual control of the disease.

To determine the actual prevalence and importance of this disease the Institute has requested the Children's Bureau to conduct an epidemiologic study on its frequency and mortality. Figures should be available in a subsequent report.

A recent study by an Institute grantee estimated the average age at death of these patients as 4 years. Nevertheless, there are about a dozen people known to have the disease who are attending college, and recently a 31-year-old patient was discovered. Today, with early diagnosis and constant care, many of these children should reach adolescence or beyond.

The recent National Research Symposium on Cystic Fibrosis held in Washington, D.C., and cosponsored by this Institute and the National Institute of Arthritis and Metabolic Diseases summarized the present knowledge of this disease and charted patterns for future study. This conference was carried out in cooperation with the National Cystic Fibrosis Research Foundation.

ALLERGY-IMMUNOLOGY

Highly productive laboratory research is evolving from the allergy-immunology program initiated 3 years ago. Basic studies by this Institute's Laboratory of Immunology are providing data fundamental to advances in many areas of medicine. Concomitantly, increasing numbers of significant findings are reported from grant-supported allergy-immunology research. The grants program represents a major national effort in this long-neglected specialty. An increase of about \$1 million brought total support to about \$2 million in 1958, representing approximately 150 grants. In 1959 grant support will approach \$3 million.

The Laboratory of Immunology has demonstrated the fallacy of the assumption that animals of the same species have identical and compatible blood serum proteins. The investigators differentiated between these proteins in rabbits and showed that some rabbits formed antibodies against sera proteins from other rabbits. Such differences in these minute blood components, if found in man, might help explain immune tolerance in tissue grafting, reactions during blood transfusions, and possibly certain inheritance mechanisms.

Some 5 million people with hay fever constitute a major health problem in the United States. Ragweed pollen is the principal allergen involved. The Laboratory of Immunology is fractionating this pollen by several methods, seeking purer extracts for desensitization purposes. Research toward better diagnosis and improved prophylaxis or treatment of ragweed hay fever is also underway at 11 universities employing grant support totaling about \$220,000. The studies are on meteorological, botanical, biochemical, and clinical aspects of this problem.

MIDDLE AMERICA RESEARCH UNIT

Established about a year ago, the Middle America Research Unit, staffed by scientists from this Institute and the Army, was coauthorized by the Department of the Army, the Panama Canal Zone Government, and the Department of Health, Education, and Welfare. The project grew out of two practical considerations: the health care of our citizens living in tropical areas, and the tropical disease problems of special concern to the United States. It is operating under the auspices of the National Institutes of Health and the Walter Reed Army Institute of Research.

The location of the laboratory in the Canal Zone is strategically adjacent to areas known to abound with insect-borne diseases about which relatively little is known or which offer particular threats to nonendemic countries nearby. These diseases are being studied from entomological, epidemiological, ecological, and virological points of view. Fungi prevalent in the area are also of special interest.

The recent occurrence of an epidemic of eastern equine encephalitis in the Pacora area of Panama has presented the Middle America Research Unit viro-

ogists with an important opportunity to pursue one of the major objectives of the laboratory—an intensive study of the ecology of the virus to determine the vector and its reservoir. The periodic occurrence of eastern equine encephalitis virus infections in the middle America areas and the almost inevitable transmission to humans (with paralytic and perhaps fatal consequences in some cases) is comparable to the epidemics of this encephalitis that appear from time to time in the eastern United States.

At the request of Panama officials and in collaboration with Army and Gorgas Laboratory scientists, specimens have been obtained from humans and farm animals in the area. Blood has been collected from domestic and wild birds. In the continuing study of various arthropods, some of which may transmit eastern equine encephalitis, yellow fever, and other viruses, more than 25,000 mosquitoes have been collected, including *Culex*, *Uranotaenia*, *Aedes*, *Psorophora*, *Mansoni*, *Anopheles*, and other genera. These have been identified and frozen for subsequent study of arboviruses at the Institute's cooperating laboratory in Bethesda.

In addition to the arboviruses, fungus diseases are a focus of Middle America Research Unit research. Army mycologists have established a project on histoplasmosis at the Canal Zone laboratories, studying the serology, ecology, and epidemiology of this fungus disease.

Histoplasmosis was first recognized and reported in Panama in 1906 by a noted American scientist, Dr. Samuel T. Darling. The first concept—that it was a rare, invariably fatal disease—has given way to recognition that most cases produce no symptoms or are mild. When lung lesions develop they may be mistaken on X-ray for tuberculosis. The disease is also misdiagnosed as virus pneumonia. It is prevalent in many areas of the United States, as well as in the tropics. Skin testing for prior exposure to *Histoplasma* fungi of military personnel arriving in the Canal Zone is one of the procedures in the histoplasmosis studies.

In the few months since its establishment, Middle America Research Unit has developed an excellent scientific staff, a reasonably adequate physical facility, and good working relationships with the numerous medical and health organizations in the Zone and the Republic of Panama.

GORGAS MEMORIAL LABORATORY

The Gorgas Memorial Laboratory was established in 1929 as the operating research facility of the Gorgas Memorial Institute of Tropical and Preventive Medicine, Inc. This was made possible by legislative action of the Congress of the United States and the National Assembly of the Republic of Panama.

Staffed by medical, entomologic, virologic, and parasitologic scientists, the Laboratory investigates diseases of the American tropics. Over the years it has won a worldwide reputation for its contributions to new knowledge of yellow fever, malaria, and a variety of microbiological infestations endemic to tropical areas.

Since the 1948 outbreak of yellow fever in Panama, the first since 1905, the Gorgas Laboratory has devoted an increasing proportion of its time to the study of this disease, and particularly to the northward movement of yellow fever in monkeys and in man from Central into North America.

In a study of the mosquito vectors of jungle yellow fever collected during an outbreak in Guatemala, Gorgas scientists were able to recover yellow fever virus from three different mosquito species. These were the first reported isolations from two of the three species.

In addition to yellow fever, a number of other viral agents have been isolated from forest mosquitoes, most of which have not yet been classified. The study of certain of the unclassified viruses is being undertaken as a cooperative project between the Gorgas Laboratory and the newly established Middle America Research Unit. The work of the latter is referred to elsewhere in this report.

The long-term study continues of the epidemiology, method of transmission, reservoir hosts, therapy and pathology of leishmaniasis, an insect-transmitted protozoan infection. Although symptoms may be superficial, disseminated leishmaniasis nearly always ends fatally if untreated. Research grants from the National Institute of Allergy and Infectious Diseases have further supported this work, and recently have been employed for field studies of the ecology of the sand flea *Phlebotomus*, a vector of leishmaniasis. In some areas along the Trans-Isthmian highway cases seem to be decreasing due to treat-

ment of large numbers of people and to progressive cutting of patches of forest harboring vectors of the disease.

Another of the important problems investigated for a number of years by the Gorgas Laboratory is Chagas' disease, primarily an infection of forest animals transmitted by insects to man. In the human host, the prevalence of the chronic form of this parasitic infection and its importance in the production of chronic heart disease have still to be evaluated and an effective treatment is still to be found. These are among the main Gorgas objectives in research on Chagas' disease.

The major portion of the operating funds of this Laboratory is supplied by U.S. congressional appropriation. The amount requested for 1960 is the same as the appropriation for 1959, \$150,000, the maximum allowed by an act of Congress passed in 1928 (22 U.S.C. 278).

BUDGET REQUEST

Dr. ANDREWS. Mr. Chairman, the budget proposal of \$24,071,000 for 1960 is the same as the 1959 appropriation, but is \$25,000 greater than 1959 obligation plans. Research by the National Institute of Allergy and Infectious Diseases will continue to utilize the microbiological approach fundamental to many of the lifesaving advances of modern medicine. The year 1959 marked an encouraging expansion of the Institute graduate training program, which should now help to strengthen general microbiology as a medical resource by providing additional trained scientists in this field, as well as in allergy-immunology and tropical medicine-parasitology.

Among the microbial agents, viruses are the least understood. They are, for example, the principal agents in respiratory disease. For the year ending in June 1958 the National Health Survey reported 284 million cases of disabling illness due to respiratory disease.

I should pause to tell you that "disabling illness" by the definition of the National Health Survey is illness which involves absence from school or from work or which requires medical attention. So that these were the more severe cases and by no means all of the cases.

The Institute continues to play a major role in research on these infections, which cost industry billions through absenteeism and lowered productivity, sharply reduce the effectiveness of our schools, and exact an annual tribute of \$3 billion in medical bills. The hemadsorption viruses first isolated by the Institute, for example, were recently shown to cause widespread respiratory disease in children and adults. Experiments are underway on a protective vaccine. A number of other vaccines are being developed or improved through Institute research.

WORK ON INFECTIONS

The National Institute of Allergy and Infectious Diseases has increased research emphasis upon two urgent public health problems—drug-resistant staphylococci epidemic today in many hospitals; and infections that most frequently are the cause of death in cystic fibrosis, a major and generally fatal disease of children.

Highly productive research is evolving from the allergy-immunology program initiated 3 years ago. Blood fractions that may be involved in transfusion and skin-grafting reactions are being characterized. Better methods of immunizing against ragweed pollen are being developed, principally through purification of allergenic extracts.

The Middle America Research Unit (MARU), cosponsored by this Institute and the Walter Reed Army Institute of Research, is beginning its second year of operation in the Panama Canal Zone. This field laboratory recently had the opportunity to study in the Republic of Panama an outbreak of eastern equine encephalitis, an insect-transmitted virus infection periodically epidemic in the Eastern United States. Army mycologists at MARU are studying particularly the fungus disease, histoplasmosis, also a public health problem in the United States. MARU works cooperatively with the Gorgas Memorial Laboratory in Panama and with other health facilities in the area.

Senator HILL. In that connection, we gave you some earmarked funds, I believe, for that staphylococci, didn't we?

Dr. ANDREWS. Yes, for both staphylococcal disease and for cystic fibrosis. I would like to speak about them if I may.

Senator HILL. I wish you would.

CYSTIC FIBROSIS

Dr. ANDREWS. With regard to cystic fibrosis, I discussed our activities and accomplishments at considerable length before the House subcommittee because of Mr. Fogarty's very special interest in this. I can summarize these for you by saying that we have had no difficulty in making grants, 24 of them in all, to the amount of something over \$380,000, which exceeds the amount earmarked by Congress for this purpose. These concern the infectious element of cystic fibrosis, which is the area of primary interest in this Institute.

Together with the National Arthritis and Metabolic Diseases Institute and with the National Cystic Fibrosis Research Foundation, a 3-day meeting was held in Washington in January to bring together scientists in this country and from overseas who have been outstanding in their research of cystic fibrosis. They summarized existing knowledge of this recently discovered disease, gave freely to us of their advice regarding research leads which should be pursued in areas where essential knowledge is still to be sought. Accordingly, our research grants program has been built upon this basis. These earmarked funds have also been used to negotiate a contract with the Children's Bureau for determining the incidence of the disease and its attendant mortality.

Because of close contacts with the pediatricians and the pediatric hospitals of the Nation, the Children's Bureau is most uniquely able to obtain reliable information on this subject. They have already given us preliminary and tentative estimates based upon hospital data that they have collected and analyzed.

These indicate that during recent years from 2,100 to 3,200 patients with cystic fibrosis were discharged annually from hospitals—14 to 25 percent of them by death. Finalized data will become available later.

The average age of death has gone up somewhat; in 1956 it was said to be around 4 years. Now it is higher, probably around 9 or 10 years, with some patients surviving to maturity.

Each year we have in our own clinical center from 25 to 50 cases of this disease on which observations are made. We are concerning

ourselves particularly with the infectious moiety of this disease. It is necessary to give antibiotics almost continuously to these little babies and youngsters which have this affliction.

Now, in the other area of earmarked funds, the staphylococci—

Senator HILL. Before you go to that: The cystic fibrosis, do you feel you are really making progress as a result of this work that you are doing?

Dr. ANDREWS. I think so. This is a difficult and stubborn subject to attack.

Senator HILL. I appreciate that.

Dr. ANDREWS. The disease apparently is one of heritable origin. About the most that can be done now is to prolong life. Ordinarily death occurred at very early ages. However, now one of our grantees, reviewing the cases for the last few years, has shown that this has been extended considerably. At present, cystic fibrosis is still next to the most common post mortem diagnosis in children's hospitals.

Dr. SHANNON. It is very discouraging.

Senator HILL. What would be the most common?

Dr. ANDREWS. The most common one under 2 years of age is congenital anomalies. The one over 2 years of age is cancer.

Senator HILL. Leukemia?

Dr. ANDREWS. Yes, sir, to a large degree.

WORK ON STAPHYLOCOCCAL DISEASE

In the other area of earmark funds, staphylococcal disease, we have also held conferences with research advisers who are specialists in this field to solicit their opinion regarding the phases of investigation which should be most promptly stimulated and supported. In accord with these recommendations, some 63 research grants have been made for a total of over \$1 million, the amount reserved by Congress for this purpose. These grants include studies of the special characteristics of hospital-acquired organisms, both in acutely diseased individuals and in symptomless carriers, and of those features of the hospital management and environment which seem to be concerned in the transmission of staphylococcal microbes.

I would like to speak briefly regarding one or two of these grants because I think they are of interest.

A question which is raised frequently in hospitals is whether or not ultraviolet radiation is of any great protection against staphylococcal infections, particularly during surgical operations. We have made a good sized grant to a coordinated five-hospital group to determine over a 3-year period—longer if necessary—whether or not direct ultraviolet radiation in operating rooms will reduce surgical wound infection.

The clinical institutions involved are all large and prominent hospitals. Operations will be performed and the surgical wounds will be evaluated afterwards without knowledge of whether ultraviolet radiation was on or off during the operation. At the end of the second year, the results will be analyzed by a medical statistician in an entirely unrelated agency.

His findings at that time should indicate whether or not the work must be continued past the 3-year period to produce unequivocal re-

sults. We believe that this study will be most helpful and will go far toward providing a final answer to a controversial, much-debated question in hospital practice.

Some of our other grants deal with the mode of action of staphylococcal toxins which generally are the cause of death in terminal cases of staphylococcal infection, the role of staphylococci in allergic asthma, staphylococcal metabolism in relation to their classification by phage typing, the importance of those organisms in or on hospital bedding, and means of increasing resistance to staphylococci.

STUDIES IN BETHESDA

In our own laboratories in Bethesda, we have a number of individuals also engaged in staphylococcal research. Their interest, of course, is more basic than applied. They deal with such considerations as the factors responsible for varying pathogenicity, the characteristics of the enzymatic and other vital mechanisms associated with staphylococci; the genetics, the nutrition, and metabolism of the organisms. You will be interested in knowing, I am sure, that we have recently secured the services, as of July 1, of a nationally recognized investigator in this field who is coming to our Institute to give overall direction to its clinical investigation. I think this will expedite our own research progress.

To supplement these remarks, we have prepared for this subcommittee a brief report—

Senator HILL. Before you leave the staphylococci infection: Do you feel you have made progress during this past year?

Dr. ANDREWS. Yes, sir; I think we have made very real progress. I was about to mention that—

Senator HILL. Go ahead. I stopped you too quickly.

PREPARED STATEMENT

Dr. ANDREWS. That is quite all right—that we have prepared a brief report of these activities which we would be glad to submit for the record if you so desire.

Senator HILL. That will be fine.

(The report referred to follows:)

SPECIAL REPORT: STAPHYLOCOCCAL INFECTIONS

In recent years the septic complications resulting from infections with strains of staphylococcus aureus resistant to antibiotic therapy have become a major cause of concern to the professional staffs and administrators of our Nation's hospitals. This organism has always been troublesome, but at present the problem has assumed a new significance.

The staphylococcus differs from many other pathogenic bacteria in that it quickly becomes resistant to an antibiotic, and once acquired this resistance is permanent. In the past few years the organism has developed resistance to one after another of the antibiotics in relatively short periods of time after their introduction. Currently, specific antibiotic-resistant strains of the organism are present in high incidence in our hospital populations (both patient and staff) and are increasing in incidence among the general population. Disease resulting from these strains is causing widespread concern. Among the more common types of infection caused by the staphylococcus are boils, simple abscesses, wound sepsis (in some hospitals as high as 20 percent of surgical wounds have become infected), and postsurgical enteritis. More rarely it causes septicemia (blood poisoning), pneumonia, osteomyelitis, and multiple deep-seated abscesses.

The problem has become so acute in the past 2 or 3 years that many of our hospitals have had to close surgical units, nurseries, and special wards for short periods of time, and to resort to rigid asepsis to stop epidemic spread of infection. Once established, the clinical management of these infections, which may not respond to any of the available antibiotics, is most discouraging.

An outline of the staphylococcal problem and the Public Health Service's accelerating program for its solution has been described briefly in the opening statement by the Director, National Institute of Allergy and Infectious Diseases. The present report will serve as a more detailed supplement to that statement.

SOURCE OF INFECTION

The staphylococcus (both pathogenic and nonpathogenic or weakly pathogenic strains) is a part of the normal flora of the skin and adjacent mucous membranes, and particularly of the nasal passages of man. The anterior portions of the latter appear to be the preferred habitat of the staphylococcus aureus (the pathogenic form), although it also is found persisting on the skin and is the usual infecting organism in pimples, furuncles, boils, etc. Thus people, all people, are a potential source of pathogenic strains of this organism, which may infect them or spread to others. In fact, few people are actually free for any great period of time of minor skin lesions due to the staphylococcus.

The presence of the more pathogenic strains in the nasal passages is of especial importance in spreading infection in certain special situations such as a newborn nursery or a surgical amphitheater. In general, the more important source of infecting organisms is the person with active infection. Organisms are released to the environment from even superficial lesions, from wound dressings, and discharges of pus from draining sinuses. In hospital nurseries superficial skin infection (impetigo) of babies has led to epidemics of fatal disease. One such episode occurred in Houston, Tex., within the last year and led to the death of 17 infants. Infection may spread from baby to mother, with resulting breast abscess or more serious disease. This means of spread on a hospital ward is of paramount importance.

While all people tend to carry the staphylococcus in the nasal passages, a particularly important situation arises when epidemic strains of antibiotic-resistant organisms are so carried. In most people the strains carried are representative of those found in the environment, and this flora is constantly changing. However, some carriers maintain the same strain for long periods of time. If this is an epidemic strain, these persons spread epidemic infection. Antibiotic-resistant strains develop and are fostered in patients treated with antibiotics and in the medical and nursing staff associated with them. Thus, hospital populations and in particular the long-term carriers on hospital staffs currently furnish the prime reservoir of antibiotic-resistant staphylococci.

The staphylococcus is moderately resistant to drying and will live on floors, walls, bedsteads, bedclothes, etc., for days and even weeks. Secondary spread from such contaminated environment is a further means of dissemination of disease.

In many cases the mode of spread seems obscure; in others where it is known, it may be extremely difficult to prevent.

EVALUATION OF THE PROBLEM

The staphylococcus is a complex organism producing a number of toxins and other toxic substances. Its mechanism of disease production and development of antibiotic resistance are unknown. Prior to the advent of the sulfonamides and antibiotics, a considerable amount of basic research was done on the organism and the diseases caused by it. This work came to a virtual halt following the introduction of these drugs to medical practice. With the emergence of resistant strains of the organism and the gradual realization that they constitute a serious epidemiological threat, it became increasingly clear that basic research must be resumed to provide a solution to the problem.

Special concern evidenced by Congress over the alarming increase in the incidence of staphylococcal infections led to a fourfold increase in funds devoted to this area over 1958 levels. This Institute received \$1 million to be allocated for extramural research to universities and medical centers after a careful consideration of the most appropriate problem areas.

RESEARCH PROGRAM PLANNING

As a guide to program planning, the National Institutes of Health convened an interstudy section meeting in August 1958 to define research needs in this area and make recommendations for their solution.

The participants first focused on the staphylococcus organism itself and agreed that one fundamental approach to the problem must be an improvement in strain definition leading to better understanding of the extreme variations shown by this organism. In view of the highly complex etiology of staphylococcal disease, they recommended that relationships of staphylococci with each other, with viruses and with other bacteria should be the subject of intensive study. Specific recommendations were offered for the use of modern bacterial genetics and the newer biochemical techniques in the study of the staphylococcus organism.

Research on the host was emphasized as a second area of approach, the scientists pointing out the need for definitions which could be used in morbidity and mortality reporting and in the interpretation of research data. In the complex interrelationship between man and the staphylococcus, they stressed the need for identifying those factors which determine the shift from invasion to frank disease. Other areas delineated included the use or misuse of antibiotics and the possibility of immunization against the disease syndrome.

In the third broad area of research—transmission of the disease—the scientists emphasized the need for research on the carrier state, pointing out that longitudinal studies of individuals should yield considerable information about basic factors which make for the dangerous carrier. Problems in transmission would also include studies of the degree to which the environment, including operating room, nursery, and wards, is involved in the transmission of staphylococcal disease. Among other problems needing clarification, the participants singled out the study of staphylococcal skin ecology in particular.

JOINT PHS-NRC CONFERENCE

Following the interstudy meetings held at the National Institutes of Health, the Public Health Service affirmed its intense concern over the staphylococcal problem by joining with the National Research Council in September to sponsor its first National Conference on Hospital-acquired Staphylococcal Disease. This conference was held at the Communicable Disease Center in Atlanta, Ga. The delegates reviewed what was known about these infections, discussed areas that require additional investigation, and planned a practical attack on the problem. One index of the anxiety generated by this problem is the fact that the conference drew delegates from a total of 59 professional organizations, and many authorities on various aspects of the staphylococcal organism participated in its work sessions.

Out of these two meetings emerged the outlines of a broad program of research on the practical aspects of staphylococcal infections, their communicability and control; and the fundamental problems of host resistance and means for strengthening it. The many papers presented by the speakers and the recommendations of the working delegates are already serving as resource material for program planning.

INTRAMURAL RESEARCH

Staphylococcal studies currently underway at the National Institute of Allergy and Infectious Diseases are of a basic nature, designed to provide information essential for the understanding and ultimate control of this disease. One is a study designed to develop a standardized test for quantitatively measuring the pathogenicity of strains of staphylococcus aureus. This would allow comparison of different strains and the correlation of particular properties of the organism with pathogenicity. In the long run it should allow determination of the factors in the organism which cause it to be pathogenic. Staphylococcal strains grown in the laboratory tend to vary day by day in various properties. Accordingly, a companion study is underway to determine ways of preserving the organism in a stable state for study and for use as reference strains.

All activities of an organism, including the exhibition of pathogenicity, presumably are mediated by enzyme systems. A study of the nutritional requirements for the production of certain enzyme systems is in progress. To

date this study has concerned mainly the factors necessary for the production of penicillinase, an enzyme that destroys penicillin. This enzyme is of some importance in the development by the staphylococcus of resistance to penicillin. As the work progresses other systems will be studied.

The major fundamental problem, of course, is the mechanism of antibiotic resistance. Long-term studies are planned to investigate the biochemical difference between sensitive and resistant strains, and to study the behavior of individual factors important in pathogenicity upon conversion from the sensitive to the resistant state.

GRANTS PROGRAM

Under the research grants program of this Institute, 53 non-Federal investigators whose primary interest area embraces the staphylococcal organism had been awarded \$791,859 by December 1958. Beyond this amount, six grants for a total of \$70,825 were committed to researchers whose primary focus lay in another area but whose work would serve to shed light on the fundamental problems of the staphylococcus.

As mentioned previously, the level of NIAID support for staphylococci research in universities and medical centers has been quadrupled in a single year. Stimulated by the serious nature of the problem itself and the sympathetic interest of the Congress, scientists are initiating new studies and accelerating those already underway. The great majority of these studies under the grants program have been activated only in the current fiscal year, many of them only in the past few months. As this broad-scale attack on the problem gains momentum we may expect fresh information shedding light on many of the obscure areas of this problem.

WORK UNDER HOUSE INCREASE

Dr. ANDREWS. The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$6,215,000 for allergy and infectious disease activities. As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

ACTIVITY NO. 1(A)—GRANTS FOR RESEARCH PROJECTS

The full amount requested of \$14,438,000 was allowed. In addition, the House approved an increase of \$4,698,000 over the amount requested in the fields of allergy and immunology, cystic fibrosis, staphylococcal infections, virology, tropical diseases, and vaccine development.

ACTIVITY NO. 1(B)—RESEARCH FELLOWSHIPS

The full amount requested of \$801,000 was allowed. In addition the House approved an increase of \$65,000 for predoctoral, postdoctoral, and special fellowships. The total House allowance is the same amount as the 1959 appropriation.

ACTIVITY NO. 1(C)—TRAINING GRANTS

The full amount requested of \$1,787,000 was allowed. In addition, the House approved an increase of \$834,000 over the amount requested in the general fields of allergy and immunology, tropical medicine and parasitology, and microbiology.

ACTIVITY NO. 2 (A)—RESEARCH

The full amount requested of \$6,577,000 and 526 positions was allowed. In addition the House provided 22 new positions and \$518,000 for alterations and renovations of space and equipment purchases for the following areas of research: allergy and immunology, virology, germ-free research, microbial physiology, and research at the Rocky Mountain Laboratory. The total House allowance is an increase of \$594,000 over the 1959 appropriation.

ACTIVITY NO. 2 (B)—REVIEW AND APPROVAL OF GRANTS

The full amount requested of \$317,000 and 20 positions was allowed. In addition, the House approved an additional seven positions and \$73,000 over the amount requested to support the expanded program of processing research projects, research fellowships, and training grants. The total House allowance is an increase of \$86,000 over the 1959 appropriation.

ACTIVITY NO. 2 (C)—ADMINISTRATION

The full amount requested of \$151,000 and 11 positions was allowed. In addition, the House provided four positions and \$27,000 for expanded administrative needs in the Office of the Director. The total House allowance for this activity is an increase of \$28,000 over the 1959 appropriation.

For overall budgetary consideration, the Department has recommended that this increase over the President's budget be eliminated by the Senate.

Senator HILL. The money can effectively be expended, can it not, to the best of your professional opinion?

Dr. ANDREWS. Yes; to the best of my professional judgment, this can be wisely expended.

GORGAS MEMORIAL RESEARCH INSTITUTE

Senator HILL. Dr. Bloedorn has been very much interested in the Gorgas Memorial Research Institute. He is on the Gorgas Memorial Institute Board. He and others on the Board there in Panama have been interested in getting a new building and some additional operating funds. Are you familiar with that matter?

Dr. ANDREWS. Yes, sir.

Senator HILL. What can you tell us about that Laboratory?

Dr. ANDREWS. I have known this Laboratory almost since its inception, and I have been acquainted with the people who have worked in this Laboratory. It is clear, I think, that it is laboring under conditions of inadequate space and physical facilities.

The Gorgas Memorial Laboratory is planning to continue its studies, which have been underway during the last years in malaria and yellow fever, and plans are also being made to initiate studies on a new disease, new to them at least, Chagas' disease, a blood infection which localizes in various tissues, especially the heart muscula-

ture—where it does most of its damage—by parasites known as trypanosomes. This Laboratory, I am happy to report, is experiencing most congenial relations with the Middle America Research Unit, which, as you know, is established close by.

PREPARED STATEMENT

Each organization has its own highly developed, specific skills which are not present in the other. And these are used to great mutual advantage of both. Plans are now maturing for a cooperative broad gaged study of the ecology of viruses in a tropical rain forest in northern Panama. This will be carried on jointly by the two laboratories, each supplying the unique facilities and knowledge which it possesses. We prepared a special report concerning the activities of the Middle America Research Unit which we would also be glad to submit for the record if you wish.

(The report referred to follows:)

SPECIAL REPORT: FIRST YEAR OPERATION, MIDDLE AMERICA RESEARCH UNIT

The Middle America Research Unit (MARU) is an interagency exploratory field research laboratory sponsored by the Public Health Service National Institute of Allergy and Infectious Diseases (NIAID) and the Walter Reed Army Institute of Research (WRAIR) in the Panama Canal Zone. It is a research unit of considerable mobility, adaptable to developing opportunities within the context of its mission, available to agencies of the U.S. Government for cooperative research, and sensitive to the objectives, needs, and collaborative resources of world medical agencies in the region.

This report on MARU supplements background information issued in February 1958, a few months after the final authorizing agreement was signed on October 16, 1957, between the Department of the Army, the Panama Canal Zone Government, and the Department of Health, Education, and Welfare.

Effective January 8, 1959, changes in the organizational structure of the NIAID removed MARU from the aegis of the Laboratory of Tropical Diseases and created at Laboratory of Tropical Virology, now parent of both MARU and its home laboratory (Section on Tropical Virology) at the National Institutes of Health in Bethesda. NIAID virologist, Dr. Alexis Shelokov, heads the new laboratory and continues in the field as Director of MARU.

Now entering its second year of operation, MARU has assembled a competent scientific staff from the NIAID and the Walter Reed Army Institute of Research, has converted former dormitory-type facilities of the Gorgas Hospital in the Canal Zone to laboratory use, has entered upon two major avenues of research, and has established excellent working relationships with the Gorgas Memorial Laboratory in the Republic of Panama and with a number of other health and research units in Middle America.

GENERAL OBJECTIVES

Work in progress along the two major avenues of approach—on arthropod-borne virus (arbovirus) diseases and on the fungus disease histoplasmosis—will be discussed in more detail after a delineation of the general situation in the geographic area and of the objectives of MARU research.

In a region where several medical research groups take pride in their reputations for work on segments of the abundant disease problems, the intent of MARU is not to encroach. By respecting the special spheres of others, the interagency laboratory has been accepted as a cooperative adjunctive unit in a region where the opportunities for profitable research far exceed the resources for exploiting them. MARU has accepted invitations to participate in certain pertinent investigations within the purview of other groups.

Infectious diseases often represent the major public health concern of tropical countries. MARU is at the crossroads of pan-American areas linked politically and economically with the United States. The health problems of the Central American area are also potentially important to health in the United States and are generally applicable to problems of military forces in the tropics and to the

well-being of an increasing number of diplomatic and commercial representatives of the United States living in these areas.

ARBORVIRUS RESEARCH

The arboviruses, or arthropod-borne viruses, are the main target for MARU research. Virus diseases in this group, including for the most part infections transmitted by mosquitoes, and also by ticks and other arthropods, represent one of the least explored areas of medical research. A number of arthropod-borne encephalitides (some cause paralysis and may be fatal) provide examples of virus diseases spread by insects, but yellow fever and dengue are also caused by members of this group.

Special emphasis is placed upon studies of the natural reservoirs and vectors of the arbovirus diseases, as well as other agents which may be of potential danger to the populations of other American countries, including the United States.

The etiological and epidemiological significance of the findings is sought through correlating several types of laboratory data such as virus isolations and increases of specific antibodies in cases of clinically recognizable illness and in antibody surveys of the general population. Intensive laboratory studies employ the most advanced methods of virus isolation. Virus specimens may be obtained from blood (human, other mammalian, avian, reptilian), cerebrospinal fluid, throat and rectal swabs, autopsy specimens, and mosquito pools.

Eastern equine encephalitis

The formidable mortality and high incidence of disabling sequelae in survivors make encephalitis ("sleeping sickness") an affliction of consequence, whatever the cause—and there are many possible causes, including viruses, bacteria, and protozoa, and fungi as well as heavy metals such as lead. Viral agents involved in encephalitis are diverse. The MARU research on encephalitides will help clarify the general picture of viral encephalitis, while focusing especially on problems of the Americas, such as eastern equine encephalitis.

The periodic occurrence of this infection in horses on the ranches of Middle America, and in the Eastern United States, may precede transmission of the virus to humans, with paralytic and perhaps fatal outcome in some cases.

In July of 1958, eastern equine encephalitis was suspected in an epizootic among horses on a large ranch near Panama City. This caused immediate concern among public health and agricultural officials over the possible need for control measures, including appropriate vaccination of the livestock. Investigators at MARU identified the virus of eastern equine encephalitis as the cause of the epizootic.

In connection with this outbreak, and pertinent to other arbovirus infections in the region, numerous specimens have been collected, principally in collaboration with the Gorgas Memorial Laboratory and other Panamanian and U.S. agencies, for laboratory testing. These include sera from over 200 wild birds, about 100 wild bats, and 65 horses. A total of 2,500 human sera from the Republic of Panama has been collected. Through joint efforts more than 25,000 mosquitoes of at least 11 different genera have also been identified and tested for the presence of arboviruses.

At the time of this report, no isolation of the eastern equine encephalitis virus had been made from any source except the brains from two encephalitic horses. Serological studies disclosed antibodies against this virus in many of the horses; possibly, in low titer, in several human beings. Sera from domestic and wild fowl are also being tested. The initial results have not established conclusively either the vector or the reservoir of eastern equine encephalitis in Panama, but epidemiological and ecological concepts being developed already show some interesting diversities when compared with concepts worked out for the Eastern United States.

In their search for reservoirs of eastern equine encephalitis, MARU investigators are testing specimens of reptilian blood, following the recent finding by Thomas, Eklund and Rush of NIAID's Rocky Mountain Laboratory, Hamilton, Mont., that the virus of western equine encephalitis can cause viremia of high titer and long duration in garter snakes.

The field study of the Panama outbreak of eastern equine encephalitis, approximately half completed at last report, has presented MARU with an important opportunity to pursue one of the major objectives of the laboratory. A preliminary résumé of the work was presented by Dr. Shelokov in November 1958, at a Miami

meeting of the Commission on Viral Infections, Armed Forces Epidemiological Board.

Arboviruses in Guatemala

The Panama Canal Zone provides an ideal location for the exploratory field studies of MARU; these investigations will extend from time to time into various areas of the Middle America region of the Western Hemisphere, including Mexico and Central America and the islands of the Caribbean Sea. This entire tropical region provides a breeding place and natural reservoir for many arboviral infections.

One such extended field study has been conducted by MARU in Guatemala to determine which tropical arboviruses are present and active in this country, as a guide to the more valuable direction of similar investigations elsewhere in Central America.

In collaboration with the Pan-American Health Organization and the Ministry of Health of Guatemala, specimens have been collected from human beings and animals in Guatemala. These consist of sera from selected healthy population groups and from patients in the acute phase of diseases suspected of being caused by tropical arboviruses. During the period of collection in Guatemala, about 600 sera were taken from human beings in representative locations throughout the country.

THE GORGAS MEMORIAL LABORATORY

Accomplishments in yellow fever research, including identification of vectors of the disease in Middle America, have contributed to the excellent reputation for tropical disease investigation of the Gorgas Memorial Laboratory, research branch of the Gorgas Memorial Institute of Tropical and Preventive Medicine. The Gorgas Laboratory is located in the Republic of Panama. Since 1929 a grant from the U.S. Government each year has aided Gorgas research. As planned at the inception of MARU, work by the NIAID laboratory has supplemented the Gorgas studies without overlapping the program of the older unit. Plans are being formulated for continued collaborative work by the two autonomous laboratories, with a pooling of skills and technical resources where mutually advantageous.

OTHER VIRUS STUDIES

Within the limitations of staff and facilities, MARU is accepting the most promising of the peripheral research opportunities, and is conducting studies on influenza, poliomyelitis, epidemic hemadsorption virus infection, and other diseases. Insofar as possible, the laboratory has provided consultative service on special problems to a number of clinics in the region, at the same time developing epidemiological information pertinent to MARU's main objective, elucidating the precise role of arboviruses in disease.

In April, May, and June 1958, during a prolonged outbreak of severe respiratory illness, three strains of a possibly new viral agent were isolated in human amnion tissue culture by the use of the hemadsorption techniques developed at NIH in 1957. In certain respects the agent seemingly differed from the hemadsorption virus types 1 and 2 recently defined by Chanock et al. of NIAID. Its precise relation to the other members of the HA virus group is under study. Preliminary check of random sera collected in July from young adults in the cities of Panama and Colon, on the Pacific and Atlantic side of the isthmus, respectively, showed a possibly significant difference in antibodies demonstrable by hemadsorption neutralization test; 15 of 30 persons on the Pacific side had significant levels, but only 1 of 10 on the Atlantic side seemed to be immune.

Cooperating in an epidemiological study, MARU was invited to participate in an investigation of an epidemic of paralytic poliomyelitis in Nicaragua. A number of strains of type 2 poliovirus were isolated in monkey kidney tissue cultures inoculated with rectal swabs from patients. Similar results were obtained by the Yale University laboratory working with materials from the same outbreak and in some instances from the same patient. This work was important because the Nicaraguan outbreak was one of the few epidemics of any size attributable to type 2 poliovirus.

FUNGUS DISEASES

Mycologists of MARU assigned by the Army's Walter Reed Army Institute of Research are determining the prevalence and epidemiological foci of fungus diseases, principally histoplasmosis, on the Isthmus of Panama.

Information is lacking on the importance of histoplasmosis on the Isthmus of Panama in newly transplanted persons. The disease was first recognized and reported in Panama in 1906 by a noted American scientist, Dr. Samuel T. Darling. The first concept—that it was a rare, invariably fatal disease—has given way to the recognition that most cases produce no symptoms or are mild. When lung lesions do develop, they may be mistaken on X-ray films for tuberculosis. The disease is also misdiagnosed as virus pneumonia. It is prevalent in many areas of the United States, as well as in the Tropics.

In cooperation with the isthmian medical facilities, over 30 cases of histoplasmosis have been serologically confirmed. Attempts to recover the causative agent, *Histoplasma capsulatum*, from acute cases of the disease have been unsuccessful thus far as might be expected from the experience of previous investigators. Ecological studies suggest that spiny rats, wild rodents of the jungle which comprise 80 percent of trapped ground mammals in Panama, may serve as a reservoir of the infection.

Extensive skin testing of groups of indigenous and resident persons is being undertaken with histoplasmin and tuberculin. Epidemiological investigations are being made to determine the source of infection of hospitalized patients with diagnosed histoplasmosis. Finally, some 500 individuals, including both military and civilian personnel, who have arrived from the United States for duty in the zone have been skin tested. These, and others who are to be added to the group, will be skin tested at intervals during their stay in the zone to determine whether they have become infected with histoplasmosis.

RESEARCH OUTPOST

The Middle America Research Unit in the Panama Canal Zone closes one of the important gaps in the belt of world-girdling tropical and semitropical stations for research in epicenters of arboviral and other imperfectly understood infections. MARU represents one facet of the United States "good neighbor" policy, as the Walter Reed Army Institute of Research, the National Institute of Allergy and Infectious Diseases, and a number of collaborative health agencies seek to provide the research knowledge essential to the success of international health activities. These activities are not only representative of simple human good will; they are in national self-interest. They have massive political impact which is felt and recognized by the individual citizen of the Nation being aided as well as by the political and intellectual leaders. MARU's recent collaborative work on eastern equine encephalitis has borne fruits of friendship as well as of research.

NEGOTIATIONS BETWEEN NIH AND DEPARTMENT

Senator HILL. If you would do that, we will appreciate it, Doctor.

Well, undoubtedly if that laboratory is to carry on its work effectively and efficiently, it has got to have better quarters and better facilities; isn't that true?

Dr. ANDREWS. I think there is no doubt about it.

Senator HILL. Can you throw any light on this, Dr. Shannon?

Dr. SHANNON. No, sir. I think that Dr. Smadel may, though. But I can say that there have been negotiations that are a bit confusing at times between the Gorgas corporation, our department, and the Bureau of the Budget with the National Institutes of Health; so that how the eventual solution is going to evolve is unclear to me. I think that all parties concerned are convinced that the Gorgas Memorial Laboratory has a rich background of research accomplishment and has a very active ongoing program.

The main holdup, which is distressing, seems to be not so much whether there is a need that should be satisfied, but rather how such a need should be satisfied. I just hope that the administrative problems can be resolved in a way that will permit progress to go on. It is literally being held up at the present time pending the solution of administrative difficulties.

Senator HILL. Can you add to that, Dr. Smadel?

Dr. SMADEL. I have nothing to add to what Dr. Andrews and Dr. Shannon have said, but I would merely reemphasize that in the opinion of all scientists in this field the Gorgas Memorial Laboratory is one of the finest of institutions. Each of us, individually and as a group, is interested in seeing that the work continues and develops. We are a little lost at the moment in the mechanism of how this might be done.

Senator HILL. Mr. Kelly, can you throw any light on this matter?

Mr. KELLY. I think I should be better informed than I am; but it is my understanding that Dr. McGinnis, the specialist on medical affairs, has carried on extensive negotiations and discussions with the Budget Bureau. And if I understand it correctly, we are now using the authorization in the existing legislation.

There is a need for a modification of the legislation to amend and extend the authorization. And I believe that this is nearing completion and in the very near future there should be proposed legislation on it.

Senator HILL. I wonder if you would check on that and give us the latest report on it.

Mr. KELLY. I will do that.

VACCINES AGAINST RESPIRATORY DISEASES

Senator HILL. Dr. Andrews, how about your programs for the development and trial of new vaccines against known types of influenza viruses?

Dr. ANDREWS. Most of our research on influenza vaccines is done extramurally and is supported by grants; the results of these studies have yet to be published or reported. However, in collaboration with medical officers of the U.S. Navy, our intramural investigators have completed a season's observations on the effectiveness of commercially prepared Asian influenza vaccine. These studies were conducted at the Great Lakes Naval Training Station.

A total of 3,355 recruits entering training were inoculated just before the outbreak of epidemic Asian influenza in 1958. Of these, 30 percent received single injections of Asian strain vaccine only; 30 percent more received equivalent amounts of polyvalent vaccines against several other strains of influenza, excluding Asian; the remaining 40 percent received placebos.

During the period of subsequent observation, when Asian influenza was epidemic at the station, the investigators found that the overall attack rate was nearly six times as high for unvaccinated controls and $4\frac{1}{2}$ times as high for those receiving polyvalent but non-Asian influenza vaccine as for those vaccinated with Asian influenza vaccine. Considering only the more severe—hospitalized—cases, the differences were similarly impressive.

It was concluded that a single dose of Asian strain influenza vaccine in young male adults was 83 to 90 percent effective, and that non-Asian polyvalent influenza vaccine was from 21 to 46 percent effective, in preventing Asian influenza.

Vaccines against upper respiratory disease other than influenza have also been prepared. These are being tested in children's welfare homes. It is already evident that inoculated individuals show evidence of specific antibody responses in their blood, but the passage of

time has not been great enough to be sure that they are not going to acquire the diseases against which they have been vaccinated.

CONTRIBUTION TO ATTACK ON INFLUENZA VIRUSES

Senator HILL. Now, will this work, do you think, definitely contribute to the attack on influenza viruses?

Dr. ANDREWS. I think that it will and, I hope, against the other respiratory viruses as well. Some of these, for example, the parainfluenza or hemadsorption viruses were even more important than Asian influenza virus in causing upper respiratory morbidity last year here in the Washington area.

As a matter of fact, there are a number of other cold—upper respiratory disease—vaccine trials going on at present. Some of them, I am sure, will be successful to some degree and will ultimately contribute to our knowledge when the time comes to write the final specifications for a polyvalent vaccine which hopefully will prevent most of the upper respiratory infections.

INFLUENZA ADVISORY COMMITTEE

Dr. SMADEL. Mr. Chairman, I think a point of interest to you and to the committee concerns some of the developments on influenza research from the epidemic of 1947. Certain of these things were reviewed in the hearings last year. While progress was made the thing that impressed the members of the NAIAD council and the Heart Council and the scientists at the NIH and elsewhere in the country was the fact that the epidemics occurred at long intervals and too often they occurred as an emergency. One was not prepared to take full advantage of this episode in order to learn more.

As a result of this unanimity of opinion, the Surgeon General appointed an influenza advisory committee which has been now based in Dr. Andrews' Institute. Dr. Dorland Davis, Dr. Andrews' scientific director, is the executive secretary of this committee. The idea of this committee is to keep together a group who are interested in influenza research and to encourage research during the interval when one epidemic is over and another begins. The idea is also that this committee would advise both Dr. Andrews' Institute and Dr. Watts' Heart Institute on how this kind of work would be done within their normal mechanism. So, it is essentially an advisory and a watchdog committee. But I believe it will be important, sir.

Senator HILL. It means that you are alert to the problem.

Dr. SMADEL. Yes, sir.

Dr. ANDREWS. Interest in influenza traditionally waxes and wanes with its epidemic occurrence. We are trying to maintain this at a more constant level.

GRANTS FOR RESEARCH ON TUBERCULOSIS

Senator HILL. Doctor, what about this old—what used to be the old No. 1 killer, tuberculosis?

Dr. ANDREWS. We are supporting a number of research grants looking toward the development of tuberculosis vaccines.

I am sorry to say that technical difficulties have interfered with the development of effective vaccines as rapidly as we had hoped. Nonetheless, I think that the prospects are not at all dismal with regard to obtaining ultimately a material which will immunize against tuberculosis without sensitizing against it.

Senator HILL. You think so?

Dr. ANDREWS. I think it is very likely; yes, sir.

Senator HILL. Do you think that is likely within a reasonable time?

Dr. ANDREWS. I would hesitate to put a time limit on it.

Dr. SHANNON. Senator, I think this is a unique area that will profit by international cooperation. There are not too many people in this country with the skills and the techniques and competence to produce the type of vaccine we are looking for; one that will remove the so-called sensitizing part of the bacillus away from the immunizing part.

On the other hand, there are three or four very outstanding groups in this country and two or three in England and also three or four quite outstanding groups in Europe.

We have discussed how we can break the bottleneck to progress in this area. Among ourselves, we are more or less decided that this can be done much better on an international basis than within a program that is largely a national effort.

I think this is worthwhile commenting on because it does represent an extraordinary opportunity. Instead of dealing with only 3 or 4 outstanding laboratories, we then deal with the 10 to 15 outstanding laboratories in the world, not only from the standpoint of developing the vaccine but also its actual trial in the field.

We hope that as time goes on that this type of very broad cooperation will be possible.

Senator HILL. Anything else, gentlemen?

Dr. ANDREWS. I have nothing further to add to what I have said, Senator.

Senator HILL. You have been very informative and very fine.

We want to thank you very much, gentlemen.

NEUROLOGY AND BLINDNESS ACTIVITIES

STATEMENT OF DR. PEARCE BAILY, DIRECTOR, NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS; ACCOMPANIED BY DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. C. J. VAN SLYKE, ASSOCIATE DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. JOSEPH E. SMADEL, ASSOCIATE DIRECTOR, NATIONAL INSTITUTES OF HEALTH; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For expenses necessary to carry out the purposes of the Act relating to neurology and blindness, \$29,403,000."

Amounts available for obligation

	1959 appropriation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$29,403,000	\$29,403,000	\$33,613,000
Deduct unobligated balance, estimated savings.....	—260,000	0	0
Total obligations.....	29,143,000	29,403,000	33,613,000

Obligations by activities

Description	1959 appropriation		1960 budget estimates		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Grants:						
(a) Research projects-----		\$16, 855, 000		\$16, 850, 000		\$19, 800, 000
(b) Research fellowships-----		536, 000		536, 000		536, 000
(c) Training-----		5, 575, 000		5, 775, 000		6, 888, 000
2. Direct operations:						
(a) Research-----	300	5, 402, 000	300	5, 435, 000	300	5, 518, 000
(b) Review and approval of grants-----	38	551, 000	38	576, 000	45	640, 000
(c) Training activities-----	5	50, 000	5	50, 000	5	50, 000
(d) Administration-----	18	174, 000	18	181, 000	18	181, 000
Total obligations-----	361	29, 143, 000	361	29, 403, 000	368	33, 613, 000

Obligations by objects

Object classification	1959 appro- priation	1960 budget estimate	1960 House allowance
Total number of permanent positions-----	361	361	368
Full-time equivalent of all other positions-----	26	26	26
Average number of all employees-----	353	364	370
Number of employees at end of year-----	394	394	401
01 Personal services-----	\$2, 359, 000	\$2, 440, 500	\$2, 477, 000
02 Travel-----	113, 000	113, 000	118, 000
03 Transportation of things-----	18, 000	18, 000	18, 000
04 Communication services-----	34, 000	34, 000	34, 000
05 Rents and utility services-----	4, 700	4, 700	4, 700
06 Printing and reproduction-----	11, 100	11, 100	11, 100
07 Other contractual services-----	456, 600	429, 600	429, 600
Reimbursements to "National Institutes of Health management fund"-----	2, 567, 000	2, 580, 000	2, 679, 000
08 Supplies and materials-----	250, 800	246, 300	248, 800
09 Equipment-----	291, 700	291, 700	293, 700
11 Grants, subsidies, and contributions-----	22, 921, 000	23, 116, 000	27, 179, 000
Contribution to retirement fund-----	114, 000	116, 000	118, 000
15 Taxes and assessments-----	9, 600	9, 600	9, 600
Subtotal-----	29, 150, 500	29, 410, 500	33, 620, 500
Deduct quarters and subsistence charges-----	7, 500	7, 500	7, 500
Total obligations-----	29, 143, 000	29, 403, 000	33, 613, 000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	361	\$29, 403, 000
Deduct unobligated balance, estimated savings		—260, 000
Revised 1960 base.....	361	29, 143, 000
1960 appropriation request.....	361	29, 403, 000
Net change requested.....		+260, 000

	1960 budget estimate		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount
Decreases:				
Reduction in research projects.....		\$5, 000		\$5, 000
Reduction in supplies and materials to partially absorb extra day's pay (261 days in 1959 and 262 days in 1960).....		4, 500		4, 500
Subtotal decreases.....		9, 500		9, 500
Increases:				
For mandatory items:				
Extra day's pay (360 days in 1959 and 261 days in 1960).....		6, 500		6, 500
Annualization costs for 36 additional positions author- ized in 1959.....		50, 000		50, 000
Subtotal mandatory increases.....		56, 500		56, 500
For program items:				
Research projects for studies relating to blindness, deafness, cerebral palsy, muscular dystrophy, epi- lepsy, multiple sclerosis, and other neurological dis- orders.....				2, 950, 000
Additional graduate training grants in fields such as pediatric neurology, neuropathology, neurochem- istry, sensory-physiology, and otolaryngology.....		200, 000		1, 063, 000
Additional special traineeships.....				250, 000
Cost of increased review and approval services.....			7	48, 000
Net change in reimbursement to "National Institutes of Health management fund".....		13, 000		112, 000
Subtotal program increases.....		213, 000	+7	+4, 423, 000
Total change requested.....		260, 000	+7	+4, 470, 000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$4,210,000 for the neurology and blindness activities. As the Secretary indicated this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Activity No. 1(a)—Grants for research projects

The full amount requested of \$16,850,000 was allowed by the House, plus an additional \$2,950,000 for studies relating to blindness, deafness, cerebral palsy, muscular dystrophy, epilepsy, multiple sclerosis, and other neurological disorders. This amount of \$19,800,000 is an increase of \$2,945,000 over the 1959 appropriation.

Activity No. 1(c)—Grants for training

The full amount requested of \$5,775,000 was allowed by the House, plus an additional \$1,113,000 for training in such fields as pediatric neurology, neuropathology, neurochemistry, sensory-physiology, and otolaryngology. This amount of \$6,888,000 is an increase of \$1,313,000 over the 1959 appropriation.

Activity No. 2(a)—Research

The full amount requested of \$5,435,000 and 300 positions was allowed by the House, plus an additional \$83,000 for centrally furnished research services. This amount of \$5,518,000 is an increase of \$116,000 over the 1959 appropriation.

Activity No. 2(b)—Review and approval of grants

The full amount requested of \$576,000 and 38 positions was allowed by the House, plus an additional \$64,000 and 7 positions which will be utilized to employ additional professional and clerical staff required for the processing, analyzing, and management of the grants and awards and for centrally furnished review and approval services. This amount of \$640,000 is an increase of \$89,000 over the 1959 appropriation.

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

PREPARED STATEMENT

Senator HILL. Next we have Dr. Bailey, neurological diseases and blindness.

Doctor, we welcome you back. We are glad to have you here as always, sir.

Dr. SHANNON. Mr. Chairman, this is the ex-president of the American Academy of Neurology and he is presently secretary-general of the World Federation of Neurology.

Dr. BAILEY. The correct title is secretary general-treasurer of the World Federation of Neurology.

Senator HILL. We congratulate you on these honors.

Dr. BAILEY. Thank you, Mr. Chairman.

With your permission I will proceed to read a summary I have of my prepared statement.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS, PUBLIC HEALTH SERVICE, ON NEUROLOGY AND BLINDNESS ACTIVITIES

Mr. Chairman and members of the committee, this statement will review for the committee the progress which the National Institute of Neurological Diseases and Blindness has made in research and training during the past year. The 1960 budget proposal for this appropriation is \$29,403,000 which is the same as 1959, but \$260,000 greater than the 1959 obligation plan.

Neurology is a relatively new branch of medicine—barely a century old. It is bristling with unsolved problems of which doctors and related scientists are painfully aware. The problems faced are not new but they are an increasing threat to the Nation because of their magnitude.

Medical developments of the last 20 years, particularly antibiotics and immunological techniques, have brought an almost incredible reduction in infant mortality from acute infectious diseases. Epidemics have been brought under control and many who formerly would have died from pneumonia in middle age are now living long past 65. The control of chronic diseases, of which diseases of the brain and nervous system are a large proportion, however, has not kept pace. At both ends of the scale, the number of children and of persons past 65 with neurological disorders has increased. In 1910, for example, four times as many children died from summer diarrhea as from congenital malformation. In 1946, the ratio was almost reversed.

The impact of neurological disorders, a large percentage of which are chronic illnesses, is felt by the entire family and often the community. Because of the excessive burden of such diseases, many families become impoverished and are forced into dependency. The social impact of these chronic illnesses is thus felt as a blow to our whole economy.

Among the many neurological and sensory disorders are those of infancy and childhood such as cerebral palsy, mental retardation, congenital malformations, muscular dystrophy, and epilepsy; the diseases of middle age such as multiple sclerosis and other demyelinating diseases; and the diseases of later life such as Parkinson's disease and cerebrovascular diseases. The disorders of sight, speech, and hearing are particularly pronounced both in childhood and old age.

Research at the present time appears to offer an outstanding challenge at the extremes in the life cycle—those disorders particularly affecting infancy and old age—cerebral palsy and mental retardation, brain strokes, and sensory disorders.

Some of the Institute's accomplishments in these and other major areas follow.

CEREBRAL PALSY

Cerebral palsy is not a single disease but represents symptoms resulting from many causes. In order to determine and prevent these causes, it is essential that a classification of the various forms of cerebral palsy be established, and the ability to differentiate among the varieties be developed.

The Institute has recognized the importance of such differentiation and during the past 3 years has established a number of programs to aid in this differentiation. This program will depend, to a large extent, upon the careful examination after death of the damaged brains of cerebral palsied individuals. Such neuropathological examinations are presently being conducted in five different centers throughout the United States and the results are beginning to provide valuable information.

Progress also is being made in the clinical differentiation of cerebral palsy. Institute grantees have reported recently on the differentiation of two large groups of cerebral palsied children. Those with symmetrical involvement of the lower extremities without other evidences of localized injury of the brain were especially separated from the group. It was found that a large percentage of these children had been premature at the time of birth. This has suggested some specific mechanism through which prematurity leads to this rather characteristic type of symmetrical paralysis and has opened an important avenue for further research.

The second major concern in determining the causes of cerebral palsy is the establishment of correlations between the circumstances and events of pregnancy, labor, and delivery, and the eventual condition of the child. Previous efforts to establish a reliable cause-and-effect relationship have failed. This has been due largely to the time lapse between the occurrence of fetal injury and the recognition of the injury. The recognition is often not possible until several years after birth.

The collaborative project for the study of perinatal morbidity has been developed in an attempt to solve this difficult problem. Within this study, which now involves the collaborative efforts of 16 different institutions, over 40,000 women will have detailed observations throughout pregnancy, and their children will be observed long enough to determine whether, in fact, there has been an injury occurring during pregnancy. This project, which is of fundamental importance in relation to cerebral palsy, is equally significant in relation to mental retardation and the congenital forms of blindness and hearing loss.

Important byproducts already are stemming from this program. A series of examinations has now been developed in order to conduct the study with precision and reliability. These examinations must be relied upon to detect and define the factors during pregnancy causing abnormalities of the offspring. They include such items as methods for obtaining accurate and detailed knowledge of the family history; an evaluation of the emotional stability of the pregnant woman and her general health, social, and economic status; the detection and evaluation of specific diseases and complications of pregnancy; observation and detailed recording of the events of labor and pregnancy; a neurological examination for the newborn; a psychological evaluation of the infant at 8 months; and a program for the detection of serological changes due to virus infection during pregnancy. Many of these methods have been subjected to careful pretest during the last year, and early in 1959 the collection of data in accordance with this protocol will be underway.

Meanwhile, a more detailed exploration of factors already known to be capable of producing injury of the baby are in progress. An important cause of neurological damage in the past has been jaundice of the newborn infant. The gradual conquest of this crippling condition represents a thrilling story. The first

important step toward its conquest was the discovery of the importance of Rh incompatibility. This was followed promptly by a recognition that it was possible, by exchange transfusion, to wash out of the baby's body the harmful antibodies received from the mother, to replace the destroyed red blood cells with new ones, and to give the infant a fresh start through the precarious first days of life.

Unfortunately, cases of jaundice are still occurring and exchange transfusion is not without its hazards. The present attack is directed to determining the mechanism through which the bile pigments circulating in the bloodstream are able to injure or destroy the brain. Why, for example, do some infants with a relatively small amount of bile in their bloodstream suffer severe brain injury, while others with a higher bilirubin level go unscathed?

An important clue regarding this question has been developed by a grantee in the course of studies on the effectiveness of certain antibiotic agents in the treatment of infections of premature infants. He discovered that children treated with sulfonamides were likely to develop kernicterus even though the level of bile in the blood was not significantly increased by this treatment. Apparently, the sulfonamides made it more likely for the brain to be injured by this toxic product.

During the past year, the mechanism through which this compound is able to increase the likelihood of brain damage in the jaundiced infant has been further elucidated. It has been found that a large amount of the bilirubin normally remains combined with certain proteins in the bloodstream and is not able to permeate the capillaries into the brain tissues to produce damage. If the blood proteins, however, are low, or if the sulfonamides displace the bile pigments from the protein, a large amount of free toxin is available, leaks through the capillary walls, and damages the brain. The level of serum protein, therefore, is an important factor in determining whether or not the brain of the jaundiced infant will be injured.

In other approaches to this same problem, investigators are studying the method by which the bile pigments are detoxified and excreted as well as the actual chemical reactions which take place between the toxic bile pigment and the brain tissue.

As a result of this series of investigations, the frequency with which the newborn infants are damaged by jaundice in the newborn period (an important cause of cerebral palsy) has been reduced well below two-thirds. The additional discoveries which will stem from the more recent knowledge can be expected to reduce this still further in the near future.

A significant program contributing toward the elucidation of the mechanism of brain injury is the Institute's perinatal project in Puerto Rico. Here a monkey colony has been established with over 70 breeding females in whom the course of pregnancy can be studied and experimentation performed. The actual sensitivity of the nervous system to periods of asphyxia, artificially produced in these animals at the time of birth, has been subject to investigation, and the extent and location of the brain damage which results is now clearly delineated. The importance of nutritional, toxic, and endocrine factors during pregnancy is the next subject for investigation in this colony. Investigators from many research centers are cooperating with this project.

This year, a special project has been developed to determine whether Asian influenza infection during pregnancy may lead to fetal injury. Preliminary reports from approximately 8,000 women have not indicated fetal injury. It is still too early, however, to know whether an increase in congenital defects, such as occurs following maternal infection with German measles, occurs also with the Asian influenza virus.

Underlying the problem of cerebral palsy is the whole question of factors which interfere with the normal development of the unborn child. The Institute is supporting a broad program in human embryology in which the mechanism of normal development is under investigation. Using X-ray or toxins, it has been demonstrated that the human embryo undergoes certain phases during which it is extremely sensitive to injury. In the human, the first 2 months of pregnancy appear to be a particularly critical time. An interesting method for determining the time at which injury has occurred to the unborn child has been found to be an examination of dental enamel. Grantees have discovered that by examining the teeth of cerebral palsied and mentally defective children, one can observe ridges corresponding with the stage of development at which injury occurred, and accurate timing of the date of this injury during pregnancy may thus be achieved.

MENTAL RETARDATION

From a position of public neglect and scientific hopelessness, the attack on mental retardation has forged forward to a dynamic status in the past few years. Many programs are now underway to aid in the prevention and treatment of mental retardation. One of these is the Institute's broadscale collaborative study relating to both cerebral palsy and mental retardation described above.

In laboratory research, the biochemistry of the body comprises one of the most hopeful fields of study. Several such studies are supported by the Institute. In one, the blood ammonia levels have been investigated. In others, investigations are underway concerning heme and bile pigment metabolism in infants, nitrogen metabolism of nervous tissues, and a chemical study of congenital mental defects.

Accounts of newly discovered defects in inborn body chemistry are bringing with them methods of treatment by diet which promise prevention of some types of mental retardation. While only a small percentage of all mental retardation has so far been shown to arise from such causes, a need for continued research in the biochemistry of the brain is evident and the actual extent of this problem is unknown.

The known biochemical types of mental retardation may be related to disturbances in the chemical characteristics of body protein, carbohydrate, fat, or of hormones. Three distinct forms of mental retardation are linked with inherited disorders of protein metabolism. They include phenylketonuria for which study is active on a special preventive diet known as the low-phenylalanine diet; H disease; and hepatolenticular degeneration (Wilson's disease).

Long known is the mental retardation of the cretin, involved with lack of iodine and thyroid hormone. Now cretinism is recognized as a group of hormone-defect ailments. The effect of thyroid hormone for prevention of associated mental retardation is still controversial, but its use for patients is worth evaluation, and research may provide more specific answers.

The recognition of previously unknown abnormalities of body chemistry among the retarded is thus a major problem. This year the Institute has launched a new program in this area utilizing the sensitivity of certain bacteria to the presence of complicated compounds whose excretion in small amounts may be overlooked by the usual chemical techniques.

In the realm of treatment, the use of glutamic acid as a possible treatment to raise the IQ of the mentally retarded remains debatable after more than 10 years of study. Further research will seek conclusive answers.

Also in the treatment phase, the Institute has made successful efforts to promote studies in speech disorders as related to mental retardation and other neurological problems. Eight such projects were started in 1958.

EPILEPSY

Research directed toward the surgical and medical control of epileptic seizures is continuing. Important advances have been made in defining with accuracy the area of the brain which is involved. This is essential in removing the epileptic foci from which seizures may originate.

A recent monograph on seizure patterns shows that artificially induced seizures in patients suffering from epilepsy have made it possible to describe with accuracy the seizure pattern, and to correlate the observed movements with the abnormal area of brain activity. Also this type of investigation has extended further through the use of depth-recording techniques. New instruments make it possible for an extremely fine wire to be inserted into the substance of the brain and through this wire to record the minute electrical discharges which appear to be associated with the currents of the seizure. Using this technique, it was found that certain seizures which were attributed to the temporal lobe actually originate from the inner surface of the frontal lobe. The extension of these methods may improve the accuracy of surgical removal which is already proving effective in certain clearly defined seizure types.

These studies also are making possible a much more accurate description of the disturbances of intellectual functions which are occasioned by the presence of irritated or destructive lesions in the brain. The artificial production of similar areas of destruction in the brains of monkeys is a useful addition, giving parallel information regarding the types of disturbances of behavior which are to be anticipated.

An excellent compilation of the various aspects of temporal lobe epilepsy is now available in a book containing the proceedings of the second colloquium sponsored by the Institute in 1957.

Several approaches to the problem of the chemical control of seizures are being undertaken. In a series of patients treated with corticosteroid hormones for unrelated diseases, it was noted that changes in the electroencephalogram (pattern of brain electrical activity) were present. Specifically, these patients showed a heightened response to certain forms of stimulation, indicating increased irritability of the brain. It is evident that hormonal factors may play a part in influencing seizure threshold and susceptibility to convulsions. Further investigations are needed to determine the extent to which these influence the occurrence of seizures in epileptic patients.

In the search for new drugs capable of controlling seizures, increasing attention is being directed toward those agents and enzymes capable of influencing the normal metabolic and chemical processes within the brain. It has recently been discovered, for example, that an inhibitor of monamine oxidase is capable of influencing seizure threshold. A carefully controlled study is now underway and will continue for the next 6 months. At the end of that time it should be possible to determine whether this agent actually will influence seizure patterns.

A further study of metabolic reactions in epileptic patients centers around the known occurrence of seizures in individuals who are lacking in the vitamin pyridoxine. This seizure state is related by interference with the proper burning of glucose in the brain tissue. By the use of radioactive tracer techniques, it is becoming possible to determine the exact nature of the blocked chemical reactions, and efforts are now in progress to determine what agents or chemicals might be administered to such patients to overcome the blocks.

It is evident that epileptic seizures may result from many different conditions—some associated with actual brain injury, others with interference with the normal chemical reactions of the brain. The eventual solution of this complex problem will depend upon the ability to recognize and define in each individual patient the nature of the defective reaction, and to correct it with the drug or agent which is most capable of restoring a normal situation. Prompt testing of newly developed agents is also essential.

DISEASES OF MUSCLE

Disorders of muscle fall within three general categories: Diseases of the muscle itself, or muscular dystrophies, in which the muscle tissue seems to be diseased or destroyed; disorders affecting the muscle exciting system and the initiation of muscle contraction—myasthenia gravis and certain familial periodic paralysis disorders; and inflammation of the muscle known as myositis.

In the past it has been extremely difficult to differentiate among these major categories, and even more complex to attempt to differentiate various entities within the categories. The study of these diseases has therefore required a highly correlated and integrated program in which patients with muscle disease are studied from the clinical, biochemical, and electrophysical point of view. The development of such a multidisciplinary approach has been a unique opportunity of the intramural program of the National Institute of Neurological Diseases and Blindness and it has been one of the outstanding parts of the intramural program.

The first approach has been a neuropathological one—the anatomical study of muscle tissue in normal and diseased states. The "Atlas of Muscle Pathology" published last year has been an outcome of this approach. This year a special study was made of 23 infants suffering from muscle weakness in the early months of life. The careful clinical and pathological examinations of these children have indicated that they comprise in fact five different diseases which until now have been confused as a single entity.

The ability to differentiate fundamental abnormalities is being increased through the utilization of the electron microscope. Capable of detecting minor structural changes, it has already demonstrated that in the myotonic form of dystrophy there is an unusual increase in the RNA elements—an important compound of all living cells.

Closely correlated with these studies of structure of muscle are special investigations concerning the motor and sensory nerves which play an important role in muscle activity. New stains have been developed through which the fine nerve

terminations can be seen. In muscle paralysis stemming from injury of the nerve, it has been demonstrated that regeneration of these fine nerve endings can take place in association with the healing process. It has not yet been determined to what extent nerve and muscle can regenerate in the case of primary diseases of muscle.

Important chemical studies are underway regarding the nature of the protein compounds of the muscle in health and diseases. It is the compounds actin and tropomyosin which play an important part in the muscle contractile process, and which are presumed to be abnormal in the case of the muscular dystrophies. It is now clearly evident that there is an abnormal protein content in dystrophic muscle. The actual distribution of this protein is being studied by the use of fluorescent-labeled elements, through radioactive tracers, and through the development of specific antibodies which carry a dye directly to the specific protein molecules under investigation. Through such studies it will be possible to determine with accuracy the actual abnormal molecules in the diseased muscle, and hopefully to determine ways in which these elements can be modified.

A special investigation this year has centered around the defects of muscle excitation which occur periodically in familial periodic paralysis. This has included a simultaneous study of the clinical progress of the disease; the level of certain important hormones such as gonadotropic, corticoids, and ketosteroids; alteration in the ionic balance of sodium and potassium in the muscle fiber and the surrounding fluids; the microscopic appearance of the muscle during periods of paralysis as compared with appearance during periods of normal activity; and the electrical activity of the muscle as demonstrated by the use of fine intracellular needle electrodes. The outstanding development in association with these studies has been the demonstration that during the period of paralysis there is a large accumulation of intracellular fluid without a significant change in the ionic balance. Also, during this period, the muscle becomes electrically unexcitable. More information regarding these changes in ionic balance is essential. It is known that there is decreased potassium excretion in the urine preceding an attack, and that in many cases an administration of potassium has a very beneficial clinical effect.

In myasthenia gravis, the major concern still relates to the mechanism by which the nerve impulse fails to reach the muscle fiber in order to initiate a voluntary contraction. The demonstration a number of years ago that the picture of myasthenia gravis can be reproduced by the administration of curare (Indian arrow poison), and that striking amelioration both of curare poisoning and myasthenia gravis by certain antagonistic (anticholinesterase) drugs has provided a basis for investigating the nature of the defect.

This Institute is conducting an active program of testing of a number of anticholinesterase drugs, including galanthamine, which has been isolated from an alkaloid in the U.S.S.R. and utilized in the treatment of myasthenia gravis. Through comparison of the action of various such compounds with the abnormalities observed in myasthenia gravis, an effort is being made to determine which of these drugs may be the most effective in treatment of this disorder, and to search for the abnormal chemical whose presence in cases of myasthenia gravis has long been suspected. It is still not certain whether the block results from the existence of some toxic agent such as curare, or whether it represents an inadequacy of liberation of a transmitter substance, its rapid destruction, or some failure of the excitable muscle fiber to react normally to this substance. The elucidation of this problem will require a continuing program of search for new compounds, and of critical analysis of the content, location, and nature of the several compounds in the human body which relate to the transmitting process.

MULTIPLE SCLEROSIS

Foremost among the research achievements for multiple sclerosis is the improved understanding of the biochemistry of the disease, its geographical distribution, and its possible relation to allergic encephalitis and viruses.

Earlier reports to Congress revealed discoveries relating to myelin which normally insulates the nerves but disappears in scattered patches in multiple sclerosis. This research included information concerning the synthesis of sphingosine, an essential compound in the fat of the myelin sheath around nerves. This year, a new mechanism was discovered for the lengthening of carbon chains leading to a product which subsequently is oxidized to sphingosine.

In a new project, serum from patients with multiple sclerosis will be examined for the presence of specific antibodies against certain compounds (antigens) which are hostile to tissue fats.

New information has been found concerning an enzyme related to deymelinization. The long name for this enzyme is butylcholinesterase. The investigators studied its distribution in the central nervous system of several common animals. In several animals, this enzyme occurs in the lining cells (endothelium) of internal organs. But in the cat and fowl, investigators discovered it in those important satellite cells which originate myelin.

The opponents or inhibitors of this enzyme have been reported to cause the loss of myelin in fowl. Hence, here is a hopeful suggestion of relationship between this enzyme and the formation of myelin. If scientists can learn why myelin disappears in multiple sclerosis, they may eventually learn how to prevent its disappearance. This would be a major step in solving the problem of multiple sclerosis.

The neuroglia, or so-called glue cells, have long been known for their support of brain structure. But recent studies of neuroglia in tissue culture and under the electron microscope now reveal that they play more than a supporting role. In fact, research indicated that they fill an important role in the formation and maintenance of myelin. Reports this year include descriptions of exciting new techniques of electron microscopy, improved silver staining of nerve fibers, and growth of nerve cells in tissue cultures in test tubes providing new foundations for research on the brain and nervous tissue.

The geographical distribution of multiple sclerosis, as reported last year, reveals that multiple sclerosis is far more common in northern United States than in the southern part of the country. The prevalence of multiple sclerosis in Japan has now been investigated, as well as incidence in various city and rural areas.

The long-term project on the effect of climate after multiple sclerosis has occurred probably will be reported by the end of 1959. The three agencies cooperating in this research are the National Institute of Neurological Diseases and Blindness, the National Research Council Follow-up Agency, and the Veterans' Administration.

As reported earlier to Congress, animals may be given an ailment with symptoms like those of multiple sclerosis. This is an "experimental allergic encephalomyelitis."

No Institute studies seeking a possible germ cause for multiple sclerosis show any indication of a spirochete as a cause. However, the similarity of experimental encephalitis in animals stimulates the search for a possible virus as a cause.

CEREBROVASCULAR DISEASES

Progress was made this year against the third-ranking killer and foremost adultcrippler, cerebrovascular diseases. "Stroke" is the popular name for the largest of this group of ailments.

The term, "cerebrovascular diseases," was agreed upon by a committee of experts appointed by the National Institute of Neurological Diseases and Blindness in 1955 to expedite progress in research on the stroke problem. This group decided a primary need was a common language in order for investigators and physicians to be able to pool their data for research. Their 34-page study provides the first classification and definition in one source of all known types of cerebrovascular diseases, and reprints are available from the Institute to medical men and scientists.

Meanwhile, the two large cooperative projects continue. In one of these, 18 institutions are studying the dangerous ballooning of blood vessel walls called aneurysms and the correction of this condition by surgery before fatal hemorrhage. First reports are anticipated toward the end of 1959.

The second large project in the brain-stroke field is the study of anticoagulant drugs to prevent strokes, or avoid other strokes after one has occurred. The largeness of the study, which is following about 1,800 patients at 7 institutions, is expected to provide much more rapid judgment than would be possible at any one hospital center.

In addition to this direct work with patients, laboratory research is making progress. The challenging field of fluid movement between blood vessels and brain is being clarified by modern techniques using harmless radioactive tracers; and the narrowing of brain arteries is being studied. Scientists have begun a systematic study of a large series of subjects. Investigators carefully evaluate the location and the degree of narrowing of the brain arteries of all sizes. A study of the different-sized blood vessels of the brain of patients in this country has now been completed and provides a baseline for comparison on which to expand this study to an international scope.

PARKINSON'S DISEASE

Research supported by the Institute at various institutions shows a well-diversified attack on Parkinson problems and related types of involuntary movements. These include studies on the structures of nerve connections in the area affected in Parkinson's; on the functioning of that area; and on tremor which is a major disability in Parkinson's. All research on aging in the human nervous system may prove helpful in this ailment as its symptoms are associated with aging.

Parkinsonism is a symptom which may actually be associated with several different disease conditions. For example, many cases were clearly a delayed aftereffect of the 1918 influenza epidemic. In other institutions, a familial pattern has been observed. This year, the Institute has launched an epidemiological program to study these factors. Preliminary reports indicate that there are over 300,000 patients with Parkinsonism in the United States.

Positive progress in surgery for Parkinsonism, the National Institute of Neurological Diseases and Blindness supported, appears as continual surgical variations and refinements are found to be involved with shaking and rigidity. At present, successful surgery requires careful selection of patients, with the younger and stronger ones most likely to be benefited. Urgently needed is effective surgery for the elderly or severely afflicted Parkinson patient. Surgery of the type used for Parkinson tremor and rigidity also helps some types of cerebral palsy patients.

Medical research continues for the best combination of drugs to control Parkinson symptoms. Both medical and surgical research adding to the general knowledge of the brain and how it functions is providing helpful information relative to Parkinson's disease.

REGENERATION IN THE NERVOUS SYSTEM

The important studies in regeneration of the spinal cord outlined last year are being carried forward in several laboratories. It is too early, however, to evaluate the results since regeneration takes many months to occur. An interesting related development is the discovery that in lower animals in which the diaphragm has been paralyzed by nerve injury, restoration of function can be accomplished by substitution of another uninjured nerve. Experiments have been initiated to determine whether this can also be accomplished in humans with respiratory paralysis after poliomyelitis or related disorders.

ENCEPHALITIS

Many conditions may cause encephalitis or brain fever. In fact, by definition any inflammation of the brain falls within this category. Because the clinical symptoms and course of many different conditions causing inflammatory reactions on the brain may be similar, it is often difficult to determine whether the causes are virus infections, allergic reactions, or toxic and deficiency states.

At a symposium on "Sequelae of the Arthropod-Borne Encephalitides," sponsored by the Institute, investigators assessed what is known about the after-effects of brain inflammations caused by mosquitoes and other insect-borne viruses. It is evident that it is necessary to have a more accurate determination of specific responsible viruses, a clearer definition of the nature of the brain inflammation, and some precise methods for assessing the subsequent brain damage.

The 1918 influenza epidemic, as mentioned above, was followed by severe long-lasting neurologic residuals. However, the specific virus which was responsible for this disease has never been isolated. The full evaluation of the long-lasting aftermaths of the disease has not yet been achieved. This was especially true since many individuals afflicted by this disease developed, as a sequelae, severe and serious changes in behavior without any clear-cut intellectual or physical impairment.

A recent study by Institute investigators of the aftereffects of a severe epidemic of mosquito-borne encephalitis in Guam shows a relatively high occurrence of subsequent intellectual impairment, physical disability, and epilepsy. There is considerable evidence today that some of the minor virus diseases of infancy such as measles and mumps, which are not infrequently associated with encephalitis, have more serious sequelae than was previously recognized. Brain wave studies suggest that minor brain damage accompanies these illnesses.

New methods of virus culture are improving our ability to isolate and classify the viruses responsible for these diseases. To be effective, however, such studies must be carried out on a worldwide scale since the distribution of viruses varies from country to country with epidemics spreading as the virus is carried abroad. For comparable studies to be carried out in different countries, a common terminology and classification of the disease processes themselves is needed. To this end, a grant has been made to the World Federation of Neurology for the conduct of a conference concerning the brain tissue of individuals dying with various types of encephalitis in order to classify the various disease patterns.

In some forms of encephalitis many hundreds of individuals may be sick for each patient who actually develops brain disease. Why this is so is not known. Studies of the blood-brain barrier—the protective membrane which prevents the transfer of some infectious agents from the bloodstream into the brain—are providing more information as to how the brain is changed by infections and toxins. Equally important is the study of the sensitivity and inflammatory reactions which the brain exhibits when exposed to infection. The nature of the inflammatory reaction in acute encephalitis is important since in many cases it appears that the inflammatory reaction actually produces more brain damage than does the infectious agent itself. Efforts to modify this inflammation in certain bacterial infections such as tuberculosis are very encouraging.

DISORDERS OF HEARING

Over the past 10 years, major advances in our knowledge of the basic structure of the ear and of the pathways over which sound is conducted to the central nervous system have gradually developed. Through electrophysiological techniques, it is possible to trace the passage of a sound impulse from the eardrum to the nerve receptor organs in the internal ear, and then to the area of the brain where the sound is received and interpreted. We reported last year on the discovery of an important new pathway—through which the brain itself is able to control the sensitivity of the ear and modify its perceptive acuity. Important new studies are using highly trained animals “conditioned” to respond to a sound with a highly organized pattern, a pattern depending upon the animal’s ability to recognize pitch, loudness, quality, or location of sound. In these animals, one can determine the deficit which results when specific brain areas are surgically removed. Such procedures are demonstrating the areas of the brain which are concerned with the interpretation of sounds, as well as the quality of behavior disturbances and the responses which result when these areas are injured. More information of this sort is needed if we are to understand the varied and complex patterns of deafness.

Investigations are in progress to determine how hearing mechanisms are damaged. The first of these studies has to do with prenatal hearing loss. The collaborative project on perinatal morbidity studies the prenatal factors and the conditions which may cause impaired hearing. Each child born during this study will be given careful otological examinations, and the presence of any abnormality will be correlated with factors in the history of the pregnancy and delivery which might be responsible.

Careful anatomical examinations of children dying at birth or in early infancy in whom hearing loss is suspected contribute to our knowledge of the mechanisms causing the damage. It is known, for example, that jaundice of the newborn infant, German measles during pregnancy, and maternal diabetes are frequently associated with deafness.

Certain forms of deafness are hereditary. Careful studies of the family tree of these hereditary forms of deafness are helping to elucidate the mechanisms of their action. Several strains of mice which have genetic hearing abnormalities are furnishing valuable clues to the mechanism of genetic deafness.

Several postnatal causes of deafness are known; streptomycin and quinine are drugs known to produce hearing loss. The effects of administration of large doses of these drugs are now being determined, and the actual structural damage which they produce is being demonstrated in the ear by careful microscopic techniques, including the electron microscope.

Changes in fluid balance in the ear and the development of swelling around this sensitive organ are also known to cause deafness. These mechanisms are being studied again in animals, by artificial hydration experiments. Meanwhile changes in circulation patterns which may also relate to this abnormal fluid collection are under investigation.

Our future understanding of deafness and the development of proper training techniques, depends upon the recognition of the specific form of deafness present in any given individual—that is whether such deafness is due to damage to the ear, the nerve, the brain stem, or to the higher brain centers. At present, it is difficult to be certain whether an individual is or is not deaf, especially in early infancy. The American Academy of Ophthalmology and Otolaryngology has initiated a national program aimed at developing methods for early identification of deafness and of the diseases causing ear damage.

There are now being supported several programs evaluating specific hearing tests, including the galvanic skin response, and the electroencephalographic response to an auditory stimulus. Finer judgments of the quality of sound, such as pitch, rhythm, and localization in space are also being evaluated in individuals showing evidences of hearing impairment or speech defect. The Institute also has two field investigations of training methods for the deaf.

Two other significant field investigations are concerned with demonstrating changes in hearing as they progress with old age. A common cause of loss of hearing in the older age groups is "otosclerosis," a condition in which the bones become stiffened and no longer are capable of vibrating in the ear. Surgical relief offers hope that these stiffened bones may once again be made to vibrate. These techniques are being evaluated in man and animals by meticulous examination of bones removed at operation, and by the study in animals of the healing process which takes place following operative procedures.

The whole field of hearing research is ready for rapid development but the training of more skilled investigators will be required if the new highly specialized instruments and techniques are to be accurately exploited.

VISUAL DISORDERS

The research program of the Institute relative to visual disorders includes research relating to: cataracts, glaucoma, retinopathy, keratitis, uveitis and other inflammatory and parasitic diseases of the eye; metabolic and degenerative disorders of the eye; strabismus and neuromuscular disorders and other ophthalmologic disorders including injuries.

A considerable amount of basic research is aimed at understanding the mechanism of vision, transmission of visual impulses and cerebral appreciation of visual stimuli.

Research relating to cornea transplants indicates that, if properly preserved, corneas can be used even after 2 years of storage. Use in over 50 patients shows that the preserved corneas are as good as fresh corneas for similar transplantation. The best means of preservation was found to be by dehydrating them with pure glycerine, sealing, and storing in vacuo at room temperature. Methods have also been developed for preserving vitreous humor for use in specialized problems of retinal detachments.

Various studies of the lens tissue of the eye have shed light on the problems of cataracts. A comparative age study, using rabbit lenses, supports the general theory that metabolic activity of the lens decreases with advancing age. Also, medium doses of irradiation have usually led to cataract formation.

A collaborative project, in which the Institute acts as coordinating agency for a number of nonfederal research facilities, is now underway to investigate the incidence, causes, and treatment of uveitis. This project is being supported to the extent of \$43,000.

Plans for a collaborative study of glaucoma are being developed by the Institute in conjunction with the Division of Special Health Services, chronic disease program of the Bureau of State Services, Public Health Service, and four research institutions interested in this subject. The study will evaluate glaucoma detection and diagnostic procedures.

Aside from these specific visual research activities, a large number of projects in which serious visual disturbances may be incidental to neurological disease are being supported. These include the extensive collaborative study in cerebral palsy and other neurological defects of infancy, studies of aneurysms and subarachnoid hemorrhage and studies of the incidence, diagnosis, and causative factors of brain tumors.

KURU

Since 1956 the Institute has been supporting an extensive field study of the problem of kuru. This rapidly fatal disease of the nervous system has been discovered in an isolated population living in the inland plateaus of New Guinea.

It bears many resemblances to certain disorders of the nervous system known in the civilized world, but has certain distinctive features.

Within the isolated valley where this disorder exists, the study has ferreted out approximately 98 percent of the existing cases, and has records of most instances which have occurred within this generation. The disorder has an extremely high incidence, affecting approximately 2 percent of the population each year, and probably accounted for over 50 percent of the deaths. For each examined case, detailed history has been recorded.

The successful acceptance of the research team among this primitive tribe has made possible the conduct of over 30 autopsies, and a number of brains have been forwarded to the Institute for special examination. Degeneration of the ganglion cells has been demonstrated and a thorough report of the pathology of kuru has been published.

In searching for the cause of kuru, accurate mapping of the geographical characteristics of the region and a charting on these maps of the distribution of this disease was conducted. Its distribution corresponds closely to an isolated ethnic group called the Fore tribe. It lends a strong support to a genetic origin.

A number of laboratory studies have been completed. Examination of blood serological specimens from patients and nonpatients both in affected and non-affected areas has demonstrated the existence of an abnormality of the protein fraction, but the relationship of this to kuru has not been defined.

Abnormalities of adrenal hormone compounds also have been demonstrated, and these have been associated with abnormalities of sodium and potassium levels in the blood serum, strongly suggesting the existence of some endocrine imbalance in this disease. The existence of some hormone imbalance is further suggested by a strong preponderance of the disease in small children and in women.

In a further effort to establish a genetic relationship, blood grouping in this population is also being conducted, and over 2,000 specimens of blood serum have been obtained for this purpose. In addition to the blood grouping conducted with this serum, it also is being subjected to antibody studies in order to obtain information on the virus exposure and experience of this previously untouched population.

GRADUATE TRAINING GRANTS

The basis of our future research program will be a corps of qualified, well-trained investigators. The major emphasis has therefore been upon grants to encourage and facilitate training of personnel for research in neurology.

The training of clinical neurologists was the first program launched, and in 1958 comprised 55 units. It will train 80 to 90 individuals each year as specialists in clinical neurology. The training of child specialists in this field is in an early stage, with three active programs in pediatric neurology at present training only 10 individuals. The critical lack of pediatric neurologists must be expected to continue unless this program can be greatly strengthened.

Advance in the neurological sciences depends also on the training of basic science investigators, including neuropathology, neuroanatomy, neurophysiology, neuropharmacology, and neurochemistry. The emphasis of the training programs developed within these areas of basic science has been to provide a sound knowledge of this basic discipline, and, in addition, a relationship to and an awareness of the clinical problems toward which these basic investigations are directed. A number of basic science training programs were established in the latter half of the calendar year 1958. The number of trainees is still small, but represents a 350-percent expansion during this year.

In the sensory disorders, the training grants in ophthalmology were increased in 1958 from 35 to 38; in otolaryngology from 6 to 18. In addition, a new area—sensory physiology—was instituted in 1958, whose purpose is to train men with Ph. D. or M.D. degrees for research in the sensory disorders. A goal of 10 programs in this area by the end of 1959 has been set.

Special traineeships

The special traineeship program has as its objective specialized advanced training for individuals undertaking advanced research careers. The 1958 program increased approximately 50 percent over 1957, and reached an expenditure of a support level of nearly \$1 million. Under this program we have been able to support 125 trainees working in 50 institutions in the United States, Canada, Europe, and South America. Although the majority of these traineeships are for individuals with an M.D. degree, this year 10 awards went to basic scientists

holding the Ph. D. degree. Almost without exception, men who have completed such traineeships move rapidly into academic positions and develop laboratories undertaking independent research.

Research fellowships

The research fellowship program continued during 1958 at a steady level, half of the funds going to scientists working toward Ph. D. degrees or electing research after receiving Ph. D. or M.D. degrees. The remaining funds were used to support undergraduate students for part-time training and experience during the medical course. Experience has indicated that the earlier in his career a medical student can be exposed to an opportunity for research, the more likely that this will prove his eventual career.

INTERNATIONAL ASPECTS OF NEUROLOGY

Neurology as a branch of medicine developed in Europe during the 19th century and has long been given a significant place in the world medical picture. The Institute staff has participated in many international developments, including the 1955 planning committee for the Sixth International Neurological Congress in Brussels. Various papers were presented by Institute scientists at the Congress in 1957.

Two significant events took place at the time of the International Congress. For the first time, representatives of many neurological disciplines met together for the First International Congress of Neurological Sciences. This included not only neurologists but also electroencephalographers, clinical neurophysiologists, neuropathologists, neurosurgeons, and other related scientists around the world.

Also, at the time of the Congress, representatives of the neurological societies of some 20 countries met together and founded the World Federation of Neurology. Its principal purpose is to serve as a formal representative body for the advancement of neurology and neurological sciences throughout the world. This will be accomplished by the dissemination and exchange of new scientific knowledge, the stimulation of basic and clinical research, the organization of international neurological congresses and symposia, and the encouragement of promising young men to pursue careers in neurology.

With headquarters in Brussels, the World Federation now has more than 30 members including Canada, the United States, many South American countries, countries of the Middle East, Europe, India, New Zealand, Japan, and even Iron Curtain countries. This organization is well qualified to serve as the coordinating mechanism for various international programs.

There is reason to believe that some of the answers to unsolved neurological problems could be found if we would pool all our detailed scientific information, review it carefully, and move forward on the basis of this new knowledge. In some instances, this would undoubtedly lead to studies in the geographic and climatic distribution of disease. Studies of this nature have provided answers in the past. At the present time we are aware of a number of leads in this field, such as the larger incidence of multiple sclerosis in cold climates.

If climate is a major factor in multiple sclerosis and other diseases, perhaps an intensive study in a very warm as well as a cold climate on another continent would provide some leads. Perhaps the mineral content of water and food should be more closely observed in other areas. These and many other types of studies referring to the evaluation of the frequency of disease and the relationship to genetic and environmental factors in diverse geographic regions and populations hold promise for the answers we are seeking.

CONCLUSION

The Institute is continuing its broad attack against disorders of the brain and nervous system. Emphasis is on the two extremes of age—the tragic disabilities of the young which bear with them the specter of lifelong dependency, and the crippling conditions of old age which shorten the satisfying period of useful existence. The central core of this program has been financial support for individual investigators whose imagination and initiative represent the foundation of research.

The recruitment of future scientists and their efficient training in superior skills constitute our capital investment in the future. The Institute's program for the training of investigators has increased in number of trainees from 11 in 1952 to 125 in 1958. The first awards were made almost exclusively for

training for research in clinical neurology. This was next extended to include ophthalmology, otolaryngology, neurosurgery, and a combination of pediatrics with these specialties. The program is now being broadened to include the basic sciences of neuroanatomy, neurochemistry, neuropathology, neuropharmacology, neurophysiology, neuroradiology, and virology of the nervous system.

The Institute's most recent research projects are in the area of cooperative and collaborative research. These programs bring together many investigators with a common area of interest at medical research centers across the Nation and represent a technique for the mobilization of previously untapped resources.

In summary, the Institute's program is encouraging an increasing number of well-trained investigators to enter the field of neurological and sensory research, providing these individuals with the tools necessary for research progress and strengthening the mechanism through which their work can be facilitated most effectively.

BUDGET REQUEST

Dr. BAILEY. Mr. Chairman and members of the committee, the budget proposal for 1960 is the same as the 1959 appropriation, but \$260,000 greater than the 1959 obligation plan.

In continuing its broad attack against disorders of the brain and nervous system, important advances have been made this past year. The emphasis has been on the two extremes of age—the tragic disabilities of young children who have before them a lifetime of disability, and the neurological disorders of advancing years which shorten productive life for many persons.

Sixteen medical centers across the Nation are now participating in the collaborative project for cerebral palsy, mental retardation, and other neurological and sensory disorders of infancy and childhood.

In the process of studying 40,000 mothers and their babies, and assembling the data at the Institute, it is hoped that some of the causes of these disorders will be determined. This should be possible as correlations are made between the circumstances and events of pregnancy, labor, and delivery and the eventual condition of the child.

I might say that payoffs from this project already are in sight.

Senator HILL. Good. I hope you are going to give us some of those payoffs in your statement.

Do you have them in this summation here?

Dr. BAILEY. No, they are not. Some of them are but not all.

Senator HILL. I would like to have this right down to date. I would like to know what these payoffs are.

Dr. BAILEY. Two of them are here. I could mention the others. And then if you would like, I could submit a more detailed account for the record.

Senator HILL. Suppose you do that.

BYPRODUCT OF PARENT-CHILD STUDY

Dr. BAILEY. Among the byproducts of this project has been the development of a neurological examination of the newborn, a psychological evaluation of the infant at 8 months and a program for the detection of serological changes due to virus infection during pregnancy.

Much progress has been made in determining the actual sensitivity of the nervous system to periods of asphyxia. The institute's colony of monkeys in Puerto Rico has aided this project. Asphyxia, artificially produced in animals at birth, has made it possible to determine the extent and location of brain damage.

We have gone a little further. We have found that the storage of glycogen in the heart muscle, glycogen and sugar in the heart, tends to ward off the damages of lack of oxygen in the newborn in monkeys.

And therefore we are on our first therapeutic or preventative program of trying to avoid brain damage by the administration of glycogen to these monkeys.

Senator HILL. That is definite progress; isn't it?

Dr. BAILEY. I think so; yes.

Senator HILL. It would seem that way to me.

PROGRESS IN PERINATAL STUDIES

Dr. BAILEY. Another item of progress in relation to the perinatal project is the discovery that the low blood sugar of the babies of toxemic mothers may result in permanent brain damage.

This condition, which previously was not considered very important, is now preventable by the proper administration of sugar to the newborn.

Senator HILL. How do you administer that sugar to the newborn?

Dr. BAILEY. It is administered intravenously.

Another thing is that the scientists in the collaborating institutes, 16 of them, have shown that there are many more cases of jaundice of the newborn than was previously recognized.

Jaundice at birth produces brain damage, and these discoveries make it possible to recognize these cases early and to take steps toward the prevention of this damage.

Now, for instance, one thing that one investigator found was that prematures with infection when they were treated with certain sulfa drugs developed jaundice which damaged the brain and resulted in mental retardation.

So, already you have prevention by not using that type of drug in the treatment of infections of prematures.

Still another discovery from the project is the occasional existence of abnormal forms of hemoglobin in the pregnant woman. In one series 16 women were so afflicted and 4 of them died during pregnancy. So now the way has been opened for the early detection of these abnormal forms of hemoglobin and the development of ways of prevention.

Senator HILL. In other words, having found the cause, your next step now is how to remove that cause?

Dr. BAILEY. That is right.

STUDIES ON EPILEPSY AND MULTIPLE SCLEROSIS

Continuing with my summary, Mr. Chairman: Important advances have been made in defining with accuracy the area of the brain which is involved in epilepsy. It is evident that epileptic seizures may result from many different conditions. Some are caused by injury, others by interferences with the normal chemical reaction of the brain. Several studies indicate that hormonal factors may play a part in influencing seizure threshold and susceptibility to convulsions. Other studies point to a vitamin deficiency in certain epilepsy patients and an interference with the proper burning of glucose in the brain tissue.

Foremost among the research achievements for multiple sclerosis is the improved understanding of the biochemistry of the disease, its geographical distribution, and its possible relation to allergic encephalitis and viruses.

An interesting epidemiological study in South America shows that the farther south you go toward the cooler climates, the more multiple sclerosis you run into.

Here the incidence in the northern parts of the United States and Canada is almost 10 times as great as in the southern parts. But in South America the highest incidence is in the southern regions. The cooler parts of South America are south and not north. So it fits in with the studies done in this country.

Senator HILL. It is logical.

Dr. BAILEY. Yes.

PROGRESS IN NERVOUS, EYE, AND EAR DISORDERS

Various studies have continued at the Institute and in supported research centers which hold increasing hope for nerve regeneration, and shed new light on causes of Parkinson's disease, hearing and vision disorders, and various other neurological disorders.

In vision there are two recent discoveries that I would like to add to the record if possible.

Senator HILL. By all means.

What are those, Doctor?

Do you have them before you?

Dr. BAILEY. Yes. I can give you the name. One is an operation on cataracts—that is, the discovery that an enzyme called alpha-chymotrypsin dissolves the suspensory ligaments of the lens, so it can be removed entirely without much trauma.

The other is a surgical method for reattaching a detached retina. You know the retina is attached to the choroid which is its underlying nutrient body. And in many eye conditions it tends to become detached.

Well, eye surgeons have discovered a way now of making the retina stick to the choroid by using an artificial light or sunlight source brought to a focus so that the light rays are condensed and make a little burn, the burn causes a slight scar, and the resulting adherence or reattachment of the two structures.

Because of the serious shortage of scientists in neurology and related disciplines, the progress of the Institute's training program has had vital significance to the entire area of neurology. Eighty to ninety persons now are being trained as specialists in clinical neurology.

Training grants in ophthalmology, otolaryngology, and neurological sciences have increased and approximately 125 special trainees (M.D.'s and Ph. D.'s) are being supported at 50 institutions.

Senator HILL. Well, in that connection I recall, I think some 2 or 3 years ago, Doctor, I spoke about the fact that it seemed that so little was being done on the ear. And as I recall, you said it was difficult to find those who work on the ear, or the people that would do the job. Has that situation improved some?

Dr. BAILEY. That situation has improved considerably. But it still is in the stimulation stage.

INTERNATIONAL PROGRAMS

The Institute's international programs have included a study in New Guinea of "kuru," a fatal neurological disease; epidemiological studies of multiple sclerosis in Japan and encephalitis in Guam; and the Institute's active participation in the World Federation of Neurology with representatives from national neurological professional societies in more than 35 countries around the world.

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$4,210,000 for the neurology and blindness activities. As the Secretary indicated this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

ACTIVITY NO. 1 (A)—GRANTS FOR RESEARCH PROJECTS

The full amount requested of \$16,850,000 was allowed by the House, plus an additional \$2,950,000 for studies relating to blindness, deafness, cerebral palsy, muscular dystrophy, epilepsy, multiple sclerosis, and other neurological disorders. This amount of \$19,800,000 is an increase of \$2,945,000 over the 1959 appropriation.

ACTIVITY NO. 1 (C)—GRANTS FOR TRAINING

The full amount requested of \$5,775,000 was allowed by the House, plus an additional \$1,113,000 for training in such fields as pediatric neurology, neuropathology, neurochemistry, sensory-physiology, and otolaryngology. This amount of \$6,888,000 is an increase of \$1,313,000 over the 1959 appropriation.

ACTIVITY NO. 2 (A)—RESEARCH

The full amount requested of \$5,435,000 and 300 positions was allowed by the House, plus an additional \$83,000 for centrally furnished research services. This amount of \$5,518,000 is an increase of \$116,000 over the 1959 appropriation.

ACTIVITY NO. 2 (B)—REVIEW AND APPROVAL OF GRANTS

The full amount requested of \$576,000 and 38 positions was allowed by the House, plus an additional \$64,000 and 7 positions which will be utilized to employ additional professional and clerical staff required for the processing, analyzing, and management of the grants and awards and for centrally furnished review and approval services. This amount of \$640,000 is an increase of \$89,000 over the 1959 appropriation.

For overall budget considerations, the Department has recommended that the increase of the President's budget be eliminated by the Senate.

Senator HILL. All right. Do you have anything you would like to add, Dr. Shannon?

Dr. SHANNON. No, sir.

Senator HILL. Anything else that you think of that you feel there has been a payoff so to speak on the program, Doctor, be sure and let us get that in the record, please, sir.

Dr. BAILEY. I will.

(The information referred to follows:)

PROMISING CLUE TO MONGOLISM

A new genetic clue to the cause of Mongolism, a tragic form of mental retardation, has been reported. New techniques have shown that body cells of Mongoloids have an extra chromosome, presumably occurring when the ovum was produced. Chromosomes are the microscopic life threads that carry the genes of heredity. The extra chromosome may be the result of a defective ovary in the mother. If so, Mongolism may become preventable.

Children afflicted with Mongolism are called Mongoloids. From a physical standpoint, Mongoloids have a broad, short skull, thick short hands with stubby fingers, feet, and trunk. An unusual crease may extend clear across the palm. They are also characterized by slanting eyes, giving them an oriental cast (hence the name "Mongoloid"), and flat saddle noses. The eyes may also show an abnormal pattern of the iris, often with white flecks, or with cataract or crossed eyes. Congenital heart disease and hernias are frequent complications.

Their greatest deficit, however, is in intellectual capacity; a Mongoloid will be slow to sit up, crawl, walk, and talk. The typical Mongoloid never has an intelligence above the imbecile range of 3 to 7 years. Some always have less mentality than a normal 3-year-old.

Because most Mongoloids have a cheerful, affectionate disposition, many do well at home; some girls can be taught useful housework. The majority, however, have to be institutionalized.

Early aging is common in those who reach adulthood, and only rarely does a Mongoloid live out a normal lifespan.

If these new genetic findings can be confirmed in future studies, they will open a new vista of research attack on the problem of Mongolism—a vista which may lead to methods of prevention or amelioration of this and related tragic conditions.

MORE KNOWLEDGE ABOUT MYELIN

New discoveries have been made on the basic mechanisms underlying the formation and destruction of the myelin sheath and its biochemical composition. As you know, it is the myelin sheath that disintegration in multiple sclerosis and other demyelinating diseases.

The synthesis by an NINDB scientist last year of sphingosine by biochemical means has added to our knowledge of our chemical composition of myelin. Sphingosine is a fatty aminoalcohol compound which is an essential element in the lipids found in the myelin sheath. This year the same investigator discovered a new mechanism for the lengthening of carbon chains leading to a product which is subsequently oxidized to sphingosine.

This increased knowledge on the chemical composition of myelin, plus new theories on how certain enzymes can stimulate the production of myelin, is a definite forward step. If scientists can learn why myelin disappears in multiple sclerosis, they should eventually discover how to prevent its disappearance.

BRAIN TUMOR DETECTION

The perfection of a brain tumor detection device gives a precise diagnosis in 90 percent of the patients tested. This is an absolutely painless technique which does not even penetrate the skin of the scalp.

NEW ADVANCES IN NERVE REGENERATION

The successful use of nerve transplants as bridges or cable grafts has resulted in a more perfect structural reestablishment of continuity in the structural regeneration of nerve tissue of severed spinal cords in cats.

A resolution of the problem of nerve regeneration of central nervous tissue is of most immediate interest to patients disabled by injuries causing paraplegia and blindness due to injury of the optic nerve.

A major obstacle in the restoration of disabled neurologic patients is the fact that central nervous tissue does not regenerate spontaneously once it has been severely injured.

In a series of experiments with cats whose spinal cords had been severed, our investigators observed that the major barrier to the reestablishment of a structural continuity of the injured spinal cord was the invasion of scar tissue between the cut ends of the cord, which acted as a roadblock. Our principal problem then was to eliminate this infiltration of scar tissue.

Several methods were tried, the most successful being found in fiscal year 1958 when we procured a nylon material which could serve both as a guiding tunnel for the growing nerve fibers from the stumps of the spinal cord and which, at the same time, would prevent the invasion of scar tissue. This was a porous material, called a Millipore filter, which contains millions of uniform tiny holes, each hole being only slightly larger than a polio virus. The Millipore filter was wrapped around the cut ends of the spinal cord like cigarette paper is wrapped around tobacco.

The Millipore sheath appeared to serve as a satisfactory protective tunnel through which the sprouting nerve fibers could grow in good alignment. It was sufficiently porous to allow nutrient fluids to penetrate and feed the growing fibers, but not porous enough to permit scar tissue to enter.

With this method, what appeared to be a satisfactory structural realignment and continuity of the regenerating nerve fibers was established. However, even though a structural continuity of the spinal cords was reestablished, there still was no restoration of function. The animals remained paralyzed. This method, obviously, was not good enough.

This year our investigators decided to try to insert some sort of central cable for additional support of the regenerating nerve fibers.

The material selected was frozen dried transplants from nerve tissue of other cats, called cable grafts. Our present method, therefore, is the combined use of the Millipore filter and the use of transplanted nerve tissue as a cable graft. This has resulted in a more perfect structural reestablished continuity of the spinal cord, but the return of function in the animals tested is still questionable. Some claim they have observed it, but these claims are too premature to announce. In my personal opinion, however, the ultimate solution is not too far off.

We are also approaching nerve regeneration from the angle of finding a growth promoting substance which would stimulate a more productive growth of nerve fibers. A growth promoting substance isolated from the salivary glands of mice has been most effective in the stimulation of nerve cells in tissue culture experiments, and more recently in live chick embryos and in postnatal rats and mice, especially in the sensory and sympathetic components of the nervous system. We are now working on a method for using a growth promoting substance for the restoration of the damaged nerve fiber tracts found in spinal cord injuries, and hope to have something to report to this committee next year.

JAUNDICE OF THE BRAIN

Recently there have been discoveries that add to our general knowledge of kernicterus or jaundice of the brain. Clinically this condition is a combination of cerebral palsy and mental retardation. It is due to a blood incompatibility involving the Rh factor. For example, an Rh negative mother can become sensitized by a blood transfusion containing Rh positive blood, or as a result of a previous pregnancy in which Rh positive blood passed the placental circulation from the fetus to the mother.

When an Rh negative mother becomes sensitized, she develops circulating antibodies in the blood which are transmitted to the fetus through the placenta. These antibodies attack the normal blood cells of the fetus, cause them to disintegrate and form an elevated amount of bilirubin in the blood. If the concentration of this bilirubin becomes high, it causes jaundice, but what is more important, it may cause permanent brain damage resulting in the form of cerebral palsy known as kernicterus or jaundice of the brain.

The recent discovery of the significance of Rh incompatibility as a cause of kernicterus, paved the way for treating the condition with exchange blood transfusions to wash out of the infant's body the harmful antibodies received from the mother, and to replace the destroyed blood cells with new ones, thus giving the infant a fresh start through the precarious first days of life.

However, the problem was not completely solved, for cases of brain jaundice still occur and exchange transfusions have certain dangers.

Recently, however, it was observed that at times some infants, with a relatively small amount of bilirubin in their bloodstream, suffered severe brain damage, while others with a high bilirubin level went unscathed.

This year we have found some clues to this paradox. For example, a grantee, in his treatment of infections of premature infants, discovered that prematures treated with sulfonamides often develop kernicterus without any significant increase of the bilirubin level in the blood.

Apparently, the sulfonamides render the brain more susceptible to the toxic effects of bilirubin. This is a good thing to know for the future treatment of prematures having infections.

During the past year, we have found out more about how brain damage is caused in the jaundiced infant. Normally, a large amount of bilirubin is combined with the protein in the bloodstream and in this combined state cannot permeate the capillary walls into the brain tissues to produce damage. If the blood proteins in the newborn are low, however, their combination with the bilirubin is interfered with, and, consequently, the bilirubin leaks through the capillary walls and produces brain damage. Therefore, we know that it is important to keep the level of blood proteins high in the newborn so as to prevent brain damage from bilirubin.

TREATMENT FOR TUMORS OF THE EYE

A promising treatment for malignant tumors of the eye in children known as retinoblastomas has been reported. This treatment consists of a combination of X-ray therapy and antibiotic therapy.

NEW DEVELOPMENT

A discovery recently made at Bethesda on activation and deactivation of the brain cells of monkeys by the use of radiomagnetic waves, introduces a promising new tool for brain research.

INTERNATIONAL EPIDEMIOLOGICAL STUDIES IN CEREBROVASCULAR DISEASE

The preliminary organization of worldwide epidemiological studies on vascular disorders of the brain and other international research programs were made possible through the collaboration of the Institute with the recently created World Federation of Neurology and other world health bodies.

I believe that our modest specialized program is consistent with the broader general concepts for the creation of a National Institute of International Research. A specialized program such as ours should help consolidate some aspects of a more general program while an overall central program would provide us with an important frame of reference.

At its November 1958 meeting, the Institute's National Advisory Council made an important grant to the World Federation of Neurology, the aims of which were to stimulate international research, and particularly to stimulate the organization of a cooperative project for investigating certain problems of vascular diseases of the brain as they appear in approximately 10 different countries. The original discoveries forming the basis of this project were made at the University of Minnesota. The World Federation of Neurology is in the process of serving as the integrating agent and central laboratory for the entire program. Its integrating functions in this respect are quite similar to those of the Institute's intramural staff in the collaborative perinatal program.

PROMISING LEADS IN SPEECH AND HEARING RESEARCH

In view of the dimensions of disability created by hearing and speech defects, research in this field is relatively low. It is improving its organization, but still has a long row to hoe. The problem centers in the fact that basic scientists only slowly have been attracted to this area of research and clinical investigations have been sparse and scattered.

We reported last year on the discovery of a new pathway (olivocochlear bundle) through which the brain is able to control the sensitivity of the ear and modify its perceptive acuity. The implications of this discovery are now being studied.

Important new studies are using highly trained animals conditioned to respond to a sound with an organized pattern—a pattern depending upon the animal's ability to recognize pitch, loudness, quality, and location of sound. In these animals, we can determine the hearing deficit which results when certain brain areas are surgically removed.

We expect to obtain much new information about hearing and speech mechanisms through our collaborative project on perinatal morbidity. Each child born during this study will be given otological examinations, and the presence of any abnormality will be correlated with factors in the history of pregnancy and delivery which might have been responsible. Moreover, pathologic examinations of children dying at birth or during early infancy in whom hearing loss is suspected should yield new information. It is known, for example, that jaundice of the newborn, German measles during pregnancy, and maternal diabetes are frequently associated with congenital deafness.

Basic studies of congenital deafness in several strains of mice are furnishing valuable clues on causes of genetic deafness.

Recently, consideration was given at a special speech and hearing conference to a possible language function test for children at age 2½ years. This test may recognize basic defects more clearly than at a later age when the child has developed adaptive mechanisms, secondary reactions, and inhibitions as the result of training and experience.

The whole field of hearing research is ready for rapid development, but the training of more skilled investigators will be necessary if the highly specialized instruments and techniques are to be effectively utilized.

NUMBER OF CONTINUATION GRANTS FOR 1960

Senator HILL. You have brought us a splendid statement and we appreciate it very much.

Earlier this year the committee requested from NIH a report indicating the number and amount of continuation grants anticipated for fiscal year 1960; the number and amount of continuation grants anticipated for which there is at present no moral commitment; the number and amount of recommended but unpaid research applications in the current fiscal year, and the number and amount of new applications recommended favorably this year.

This tabulation indicates that a total of \$17 million more than is in the House allowance for research grants could be used. The table will be inserted at this point in the record.

(The table referred to follows:)

National Institutes of Health, research grants, fiscal year 1960 ¹

	General	Cancer ²	Mental health	Heart	Dental	Arthritis	Allergy	Neurology	Total
1. The number and amount of continuation grants anticipated for fiscal year 1960 for which there is a moral commitment-----	\$13,338,000 (847)	\$24,712,000 (1,216)	\$12,800,000 (541)	\$21,066,000 (1,126)	\$2,398,000 (207)	\$16,296,000 (1,134)	\$12,400,000 (862)	\$13,989,000 (722)	\$116,999,000 (6,655)
2. The number and amount of continuation grants anticipated for which there is at present no moral commitment-----	\$1,319,000 (85)	\$3,545,000 (238)	\$2,850,000 (184)	\$3,000,000 (197)	\$635,000 (56)	\$2,370,000 (102)	\$1,475,000 (140)	\$3,167,000 (231)	\$18,361,000 (1,233)
3. The number and amount of recommended but unpaid applications for fiscal year 1959--	\$1,150,000 (72)	0	0	\$2,476,000 (165)	\$182,000 (14)	\$3,164,000 (222)	\$1,698,000 (138)	\$276,000 (26)	\$8,946,000 (637)
4. The number and amount of new applications recommended favorably in fiscal year 1959--	\$7,124,000 (496)	\$6,926,000 (383)	\$6,110,000 (393)	\$6,188,000 (331)	\$900,000 (85)	\$7,999,000 (571)	\$4,600,000 (330)	\$5,460,000 (336)	\$45,307,000 (2,925)
5. Total-----	\$22,931,000 (1,500)	\$35,183,000 (1,837)	\$21,750,000 (1,118)	\$32,730,000 (1,819)	\$4,115,000 (362)	\$29,829,000 (2,029)	\$20,173,000 (1,470)	\$22,892,000 (1,315)	\$189,613,000 (11,450)

¹ Includes 15 percent allowance for indirect costs.
² Includes cancer research projects and cancer field investigation projects.

ESTIMATE FOR RESEARCH APPLICATIONS

Senator HILL. In this connection, last year the committee, in response to questions, elicited information that you estimated a need for \$131,135,000 for research applications.

The committee requested a further report on your predictions of last year to see how accurate they stood up at the same time we asked for the report on next year's predictions.

The comparison table which has been supplied, and which will be included in the hearings, indicates that the actual approvals came to \$150,970,000, or some \$19 million more than predicted.

(The table referred to follows:)

Comparison table, fiscal year 1959 approvals: (a) Estimated Apr. 14, 1958; (b) actual 1959
[In thousands]

	General	Cancer	Mental health	Heart	Dental	Arthritis	Allergy	Neurology	Total
1. Committed continuations:									
(a) Apr. 14, 1958, estimate-----	6,736	17,023	9,203	16,400	1,905	9,400	8,880	9,027	78,574
(b) Actual approvals 1959-----	6,760	17,777	9,254	16,413	1,782	9,214	8,680	10,020	79,900
2. Noncommitted continuations:									
(a) Apr. 14, 1959, estimate-----	300	475	600	750	540	600	452	550	4,267
(b) Actual 1959 approvals-----	2,403	2,966	1,377	2,611	356	1,597	1,371	2,142	14,823
3. Carryover, unpaid 1958:									
(a) Apr. 14, 1958, estimate-----	2,200			1,300	465	3,843	1,963	1,040	10,811
(b) Actual 1959 approvals-----	2,107	67	185	1,979	417	3,164	1,930	1,091	10,940
4. New (held to 1958 level):									
(a) Apr. 14, 1958, estimate-----	4,770	6,507	5,201	5,567	1,093	6,200	4,705	3,440	37,483
(b) Actual 1959 approvals-----	7,124	6,926	6,110	6,188	1,900	7,999	4,600	5,460	45,307
5. Total:									
(a) Apr. 14, 1958, estimate-----	14,006	24,005	15,004	24,017	4,003	20,043	16,000	14,057	131,135
(b) Actual 1959 approvals-----	18,394	27,736	16,926	27,191	3,455	21,974	16,581	18,713	150,970

ANIMAL QUARTERS, HAMILTON, MONT.

Dr. SHANNON. I believe we discussed this before.
Perhaps I can just submit this.

Senator HILL. I think that was in that statement—that which is in that statement is already pretty well in the record.

I don't suppose there is anything to add to the animal quarters at Hamilton, Mont.?

Dr. SHANNON. No, sir. I believe we covered that.

Senator HILL. There is a \$150,000 item here cited as "Research facilities construction and site acquisition."

RESEARCH FACILITIES CONSTRUCTION AND SITE ACQUISITION

STATEMENTS OF DR. JOSEPH E. SMADEL, ASSOCIATE DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; DR. LEROY E. BURNEY, SURGEON GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For the acquisition of a site for research facilities for large animals, including repairs, alterations, and construction of auxiliary facilities and temporary buildings, \$150,000, to remain available until expended."

Amounts available for obligation

	1959 appro- priation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	0	\$150, 000	\$150, 000

Obligations by activities

	1959 appropriation		1960 budget estimates		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Acquisition of site.....	0	0	0	\$150, 000	0	\$150, 000

Obligations by object

Object classification	1959 appro- priation	1960 budget estimate	1960 House allowance
10 Land and structures.....	0	\$150, 000	\$150, 000

USE OF LARGE ANIMALS FOR RESEARCH

Dr. SMADEL. Mr. Chairman, the steadily increasing requirements for large animals for the investigative work of the NIH is part of a long trend, we believe. There are now available for work by the investigators in Bethesda some 1,500 large animals. And these include

horses, cows, sheep, goats, dogs, monkeys, and cats. We estimate that in 1961 this number will increase to something of the order of 2,000. And that within 5 years it will probably double, that is, to 3,000.

These animals are used for a number of purposes. In the first place, as the research work has gone into the chronic diseases, many of the animals, such as dogs, are kept for a good number of years. This means that more and more facilities are needed to hold these animals. There is increasing need for the larger animals such as horses and sheep to provide materials for the tissue culture.

NEED FOR LARGE ANIMAL FARM

And finally the facility that we have had available to us, a small 6-acre plot with some barn facilities is not adequate for our present needs, and it will not be adequate for our future needs. This facility has been very generously made available by a Mr. Casey, but the current lease has only 2 more years to run.

Over the period of the last several years, we have investigated the possibility of finding federally owned land in the general vicinity of Washington which might be used for a large animal farm. We have looked into the possibility of acquiring this from some of the other Government agencies and some of their installations in the neighborhood.

This has not seemed feasible.

It is our belief that it would be most desirable to acquire about a 400-acre farm in the western part of Montgomery County or in Frederick County that would be about 45 minutes by rapid transportation, which is now developing along Route 240, between the NIH and the farm.

These are our needs and our hopes.

LAND ACQUISITION

The \$150,000 which was requested in the President's budget is primarily for the acquisition of land. The price of land, in this neighborhood is constantly going up, as you know. And we would like to get the land now before it skyrockets in price again.

This matter has been reviewed in the House, and the House allowed the request of \$150,000 for—

acquisition of the site outside the metropolitan area for large animals necessary for the research programs of the National Institutes of Health.

Senator HILL. Well, but you will need, will you not, additional funds for access roads, utilities, and for the building improvement.

Dr. SMADEL. We shall need those, sir. This will be a development over a period of years.

Dr. SHANNON. I might say, Mr. Chairman, that our main purpose right now is to get land. Quite apart from the price, it is our conviction that if we don't get this this year, or next year, we will never get it. Because the land just won't be available.

We prepared plans over the years. We have been trying to obtain a site for 3 years. These plans have been quite elaborate. Our approach this time was to ask for the least possible thing in order to get the budget item in and get the land, and then perhaps worry about this development at a later date.

We are delighted that the Department and the Bureau of the Budget agreed this was an essential thing. We are delighted that the House passed it. And this we consider to be initially a great step forward, sir.

QUESTION OF DISTANCES

Senator HILL. Do you think you will have to go 45 minutes away to get this land?

Dr. SHANNON. Yes, sir.

Senator HILL. That area is so developed now.

Dr. SHANNON. Yes, sir.

Senator HILL. That would be out beyond Rockville, would it?

Dr. SHANNON. Yes; perhaps as far away as Frederick, or perhaps a little to the west.

Senator HILL. That land would be about as close as any land you could get today?

Dr. SHANNON. Yes, sir. We have really surveyed the entire area. And actually there are not too many parcels of land of suitable size that are close to transportation, with flat space, adequate water supply, reasonable access to utilities, and things of that sort.

PRESENT LEASE ARRANGEMENTS

Senator HILL. You say the lease on your present farm facility will run out in 2 years?

Dr. SHANNON. Yes, sir. I might say this is not a lease so much as it is an agreement. Mr. Casey has been most generous. He not only has allowed us the use of this land over the past 10 years or so, but in addition to that, of his own funds, he has contributed varying amounts of money from fifty to one hundred thousand dollars a year for construction there for our purposes rather than for his.

This has been a most generous arrangement. And I don't know what the National Institutes of Health would have done without it. But we know that his property is in an area that now is being subdivided into building lots and we feel that he can't possibly afford an indefinite agreement such as this.

We are concerned with providing a more stable place, a more permanent place. Because economically we feel we just can't continue such a generous arrangement. Really it has been a fine arrangement up to the present time.

Senator HILL. I am sure he deserves great thanks for the contributions he has made.

Dr. SHANNON. Yes, sir.

Senator HILL. What I was wondering about was if the agreement does end in 2 years, I was wondering how necessary it might be not only to go ahead and buy the land, but look to the utilities and the roads and the buildings that have to go on the land.

Dr. SHANNON. Well, sir, originally, when we proposed this program to the Department—and it had Secretary Folsom's approval at that time—we proposed a program that amounted to, as I recall, \$300,000.

This involved acquisition of the land, the development of primary access roads, the development of primary access to utilities, and a minimal amount of buildings.

I think that we will present in the 1961 budget, hopefully with the approval of the Bureau of the Budget, plans for the rather rapid development of it. Because we will have a very sizable job to be done in fiscal 1961 to prepare a site and the transfer to the farm.

But our position now is that we are just thankful that we will have the authorization, hopefully, to purchase the land.

It is not the most satisfactory solution, but at least it is a beginning, sir.

Senator HILL. All right.

Is there anything else?

Dr. SHANNON. No, sir. That is all.

Thank you very much, Mr. Chairman.

GRANTS FOR CONSTRUCTION OF RESEARCH FACILITIES

STATEMENT OF DR. C. J. VAN SLYKE, ASSOCIATE DIRECTOR, NATIONAL INSTITUTES OF HEALTH; ACCOMPANIED BY DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH; AND JAMES E. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For grants pursuant to the Health Research Facilities Act of 1956, [\$30,000,000] as amended by the Act of August 27, 1958 (72 Stat. 933), \$20,000,000."

Amounts available for obligation

	1959 appropriation	1960 budget estimate	1960 House allowance
Appropriation or estimate-----	\$30,000,000	\$20,000,000	\$30,000,000

Obligations by activities

Description	1959 appropriation		1960 budget estimates		1960 House allowance	
	Positions	Amount	Positions	Amount	Positions	Amount
Grants for construction and equipment (total obligations)-----	0	\$30,000,000	0	\$20,000,000	0	\$30,000,000

Obligations by objects

Object classification	1959 appropriation	1960 budget estimate	1960 House allowance
11 Grants, subsidies, and contributions-----	\$30,000,000	\$20,000,000	\$30,000,000

Summary of changes

1959 actual appropriation.....	\$30, 000, 000
1960 appropriation request.....	20, 000, 000
Net change requested.....	—10, 000, 000

	1960 budget estimate	1960 House allowance
Decreases: Grants for construction and equipment.....	\$10, 000, 000	0
Total change requested.....	—10, 000, 000	0

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$10 million for "Grants for construction of health research facilities." As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee, the following statement is submitted in explanation of how this increase, if enacted, would be applied:

The increase of \$10 million would provide for a total of \$30 million, the level authorized under existing legislation.

For overall budgetary considerations, the Department has recommended that the increase over the President's budget be eliminated by the Senate.

PREPARED STATEMENT

Senator HILL. Doctor, the House increased the budget estimate of \$20 million by \$10 million, did they not? And it is true that you have received applications in excess of the authorization of \$30 million, haven't you?

Dr. VAN SLYKE. That is right, Mr. Chairman.

Senator HILL. You have filed your statement with the committee, have you not, Doctor?

Dr. VAN SLYKE. Yes, sir.

Senator HILL. Your full statement will appear in the record at this point, Doctor.

(The statement referred to follows:)

STATEMENT OF DEPUTY DIRECTOR, NATIONAL INSTITUTES OF HEALTH, PUBLIC HEALTH SERVICE ON GRANTS FOR CONSTRUCTION OF HEALTH RESEARCH FACILITIES

Mr. Chairman and members of the committee, the Health Research Facilities Act of 1956 (title VII of the Public Health Service Act, enacted as Public Law 835, 84th Cong., amended by Public Law 777, 85th Con.) authorized Public Health Service grants for construction of health research facilities. This act was intended to provide health research facilities construction grants "to non-Federal public and nonprofit institutions for the constructing and equipping of facilities for research in the sciences related to health—medicine, osteopathy, dentistry, public health, and fundamental and applied sciences when related thereto."

The initial basic legislation authorized appropriations of \$30 million for each of 3 years—1957, 1958, and 1959. Appropriations of the \$30 million were made by the Congress for 1957, 1958, and 1959. During the last Congress, this act was extended to provide authorization of \$30 million for each of 3 additional years—1960, 1961, and 1962. The \$20 million requested for 1960, less than the authorized program level, is consistent with the administration's policy of deferring construction starts.

The Surgeon General may award these construction grants only if the National Advisory Council on Health Research Facilities has recommended approval and the grantee institution has agreed to match the funds provided

by the Public Health Service in at least an equal amount. The Health Research Facilities Act of 1956 established this Council with the Surgeon General of the Public Health Service as Chairman, 1 ex officio member from the National Science Foundation, and 12 appointive members.

Following the recommendations of the National Advisory Council on Health Research Facilities, the Surgeon General submitted the first annual report on January 15, 1957, to the President, who submitted it to the Congress on February 6, 1957. This report is identified as House Document No. 21, 85th Congress. The second annual report was submitted by the President on February 4, 1958, and after referral to the House Committee on Interstate and Foreign Commerce was printed as House Document No. 324. The third annual report was submitted by the President to Congress on February 3, 1959, and was printed as House Document No. 73.

PROGRESS REPORT ON GRANTS AWARDED

Since the beginning of the program 690 new, revised, and supplemental applications have been received in a total request of \$193,817,418. To date the Surgeon General has awarded 496 grants, including supplementals, to 248 institutions in 45 States, the District of Columbia, and Hawaii. These grants total \$90 million, but represent a total construction volume of \$500,278,183.

Sixty-four medical schools have received 169 grants valued at \$49,108,879; 12 dental schools have received 14 grants totaling \$1,044,800; 3 schools of public health have received 5 grants in the total amount of \$994,145; other school programs such as veterinary medicine, pharmacy, chemistry, and biological sciences have received 146 grants in the total amount of \$19,410,058; and other public and private nonprofit institutions other than schools have received 162 grants valued at \$19,442,118.

Construction progress

This past year has shown considerable progress in the construction, completion, and utilization of new and renovated research facilities under this program. As of December 31, 1958, there were 98 completed projects representing a total construction cost of \$64,164,682. These projects received a total of \$12,011,906 in construction and equipment grants. An additional 68 projects were under contract at a total construction cost of \$153,365,688. This latter group received \$24,882,270 in facilities grants.

COMMITTEE RECESS

Senator HILL. We want to thank you, gentlemen.

The committee will stand in recess.

(Whereupon, at 3:40 o'clock, Wednesday, May 6, 1959, the subcommittee recessed to reconvene at 2 p.m., Monday, May 11, 1959.)

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION,
AND WELFARE APPROPRIATIONS FOR 1960

MONDAY, MAY 11, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 2 p.m., pursuant to call, in room F-82, the Capitol, Hon. Lister Hill, chairman of the subcommittee, presiding.
Present: Senators Hill, Bible, and Byrd.

PUBLIC HEALTH SERVICE

OPERATIONS, NATIONAL LIBRARY OF MEDICINE

STATEMENTS OF DR. FRANK B. ROGERS, DIRECTOR, NATIONAL LIBRARY OF MEDICINE; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“For expenses, not otherwise provided for, necessary to carry out the National Library of Medicine Act (42 U.S.C. 275), **[\$1,415,000]** \$1,566,000.”

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation.....	\$1, 415, 000	\$1, 566, 000	\$1, 566, 000
Supplemental appropriation.....	111, 000	0	0
Total obligations.....	1, 526, 000	1, 566, 000	1, 566, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Library operations (total obligations).....	224	\$1, 526, 000	224	\$1, 566, 000	224	\$1, 566, 000

Obligations by objects

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Total number of permanent positions.....	224	224	224
Full-time equivalent of all other positions.....		1	1
Average number of all employees.....	217	217	217
Number of employees at end of year.....	221	221	221
01 Personal services.....	\$1, 157, 000	\$1, 189, 200	\$1, 189, 200
02 Travel.....	8, 800	8, 800	8, 800
03 Transportation of things.....	400	400	400
04 Communication services.....	13, 700	13, 700	13, 700
05 Rents and utility services.....	23, 300	23, 300	23, 300
06 Printing and reproduction.....	90, 300	90, 300	90, 300
07 Other contractual services.....	29, 600	29, 600	29, 600
08 Supplies and materials.....	45, 600	51, 800	51, 800
09 Equipment.....	86, 600	86, 600	86, 600
11 Contribution to retirement fund.....	69, 400	71, 000	71, 000
15 Taxes and assessments.....	1, 300	1, 300	1, 300
Total obligations.....	1, 526, 000	1, 566, 000	1, 566, 000

PREPARED STATEMENT

Senator HILL. The committee will kindly come to order. We are very happy to have our friend Dr. Rogers, Director of the National Library of Medicine.

Dr. ROGERS. I have submitted a formal statement for the record, Senator Hill, but I would like to summarize it if I may.

Senator HILL. All right, sir.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, NATIONAL LIBRARY OF MEDICINE, PUBLIC HEALTH SERVICE, ON OPERATIONS, NATIONAL LIBRARY OF MEDICINE

Mr. Chairman and members of the committee, since its founding in 1836 in the Office of the Surgeon General of the Army, the National Library of Medicine has risen to the unchallenged position of having the greatest collection of medical literature in existence and has extended its services worldwide.

USE OF THE COLLECTION

Present holdings of the library exceed 1 million items and the collection continues to grow at the rate of over 88,000 pieces each year. Each year, over 110,000 loans of material are made to users of the library worldwide; hundreds of special bibliographies are compiled, and over 8,000 reference questions are answered.

PUBLICATIONS PROGRAM

Major bibliographical aids prepared this past year include the "Bibliography of Medical Reviews," "Current List of Medical Literature," bibliography on "Staphylococcal Infection," "Bibliography on Space Medicine," "Guide to Russian Medical Literature," "Psychopharmaca Bibliography," and "National Library of Medicine Catalog."

Last month we announced the publication of "Psychopharmaca, a Bibliography of Psychopharmacology, 1952-57." This publication was compiled by the library at the request of the Psychopharmacology Service Center, National Institutes of Health. It is another in a series of extensive bibliographies prepared by the library since 1950. References to approximately 2,500 articles from the literature of 1952 through 1957 make up the bibliography of 258 pages. The articles are concerned with the effect of psychopharmacologic agents on the psychological, behavioral, and encephalographic reactions of normal subjects, patients, and laboratory animals.

The "National Library of Medicine Catalog" for 1958 will be published this month. The catalog, published annually with the quinquennial cumulations, is a major contribution to medical bibliography. It lists the world's output of current medical literature in book form and serves the bibliographer and research

man alike as a help in book selection, ordering, cataloging, reference, and research. The 1958 volume contains 1,031 pages and 21,272 main entries.

CURRENT LIST OF MEDICAL LITERATURE

Aided by financial assistance in the form of a gift of \$73,800 from the Council on Library Resources, Inc., the library is continuing a program for improving its indexing publication mechanisms. Aims of the project are to experiment with and develop mechanical systems for the filing and layout operations involved in preparing printer's copy for the "Current List of Medical Literature;" to achieve maximum convenience of consultation through improved format; to improve methods for preparing cumulative indexes; and to provide methods for rapid selection and assembly for publication of material relating to specialties within the medical field. In terms of sheer number of articles listed, the "Current List of Medical Literature" is the largest indexing service of the literature of a specialized subject in the world. This program is currently listing 110,000 journal articles with some 495,000 index entries, each year.

NEW LIBRARY BUILDING

Construction funds for the new library building were included in Public Law 85-580, making appropriations for 1959. Final working drawings and specifications were completed in February. Invitations to bid on the construction contract were advertised March 31 with a bid opening date of May 5, 1959. The anticipated date for completing the building is June 1, 1961.

1960 BUDGET ESTIMATE

This estimate of \$1,566,000 reflects an increase of \$40,000 above 1959 requirements. The increase will permit continuation of the library's operations at its present level, provide for cost of postage absorbed in 1959, and provide for additional supplies and materials to cover increased production of microfilm records for the preservation of parts of the collection disintegrating through heavy use and the poor quality of paper used in its printing.

SCOPE OF OPERATION

Dr. ROGERS. As you know, the National Library of Medicine is now in its 123d year of operation and has long since come to be the greatest collection of medical literature in the world.

The collections of the library hold over a million items of the world's medical literature, and we loan about 100,000 items every year to physicians in this country and, indeed, other parts of the world.

Senator HILL. You have furnished me with a great deal of information, Doctor, for which I am very grateful.

Dr. ROGERS. Thank you. We have a publication program which is a major part of our service. If we are to be a National Library of Medicine, it is necessary to make known to a national audience what is available in our collections.

PUBLICATIONS

We have three major publications. One is our annual catalog of the books which come through our hands. The 1958 volume has just been published; it is now being gathered and bound. We have our monthly periodical index, the "Current List of Medical Literature," which lists the current journal literature of medicine. This past year we have indexed 110,000 articles, to which we have furnished half a million subject and author entries.

Our third publication is the Bibliography of Medical Reviews which appears once a year and which lists the review literature of medicine.

In addition to these regular publications, we have other publications which we issue from time to time. This year we have put out this "Guide to Russian Medical Literature," which is a key to the very large collection of Russian medical literature in the National Library of Medicine.

We published a bibliography on staphylococcus infection last summer at the time when this subject was of the very greatest interest to the medical fraternity in this country. It met with great success.

We have just published this remarkable bibliography, "Psychopharmaca," dealing with the literature on drugs affecting the psyche. This literature has appeared since 1951, since Dr. Laborit of France first introduced chlorpromazine. This lists about 2,500 articles which have appeared in this literature.

Senator HILL. On this subject of drugs and mental illness?

Dr. ROGERS. Yes, sir. We have had, as you are very well aware, a building program underway for a long time. It is a great pleasure for me to report to you that the bids were opened 6 days ago; that they come well under the estimate that had been made; that it is likely that contracts will be signed before the end of this month.

This contract will call for a 720-day completion, which theoretically should make the building ready for occupancy on June 1, 1961.

COMPLETION OF BUILDING

We are to hold a ground-breaking ceremony on June 12, at which you are to do us the honor of turning the first spade of earth. I would like to give you a copy of the program for that ceremony.

Senator HILL. Thank you, sir. Do you have an extra copy of this?

Dr. ROGERS. That is the only copy I have with me, but I will send some more.

Senator HILL. If you would send a copy up so Senator Byrd could have one, that would be very fine.

BUDGET REQUEST, 1960

Dr. ROGERS. Our budget which we are asking for 1960 is \$1,566,000. This is an increase of \$40,000 over the current year's appropriation. It will allow us to maintain our operations at our current level, with some small increases for preservation of those old items of the collection which are falling to pieces due to age.

Senator HILL. I am glad to hear you say that your bids for the construction of your library building were under the estimates.

Dr. ROGERS. Yes, sir.

Senator HILL. Were they under very much, Colonel?

Dr. ROGERS. Quite a bit. There were three separate bids made: One for basic construction, another bid for elevators, and a third bid for the book stacks. All of these came in somewhat under the amounts we had available, which made us very happy.

Senator HILL. In other words, then, you have now available sufficient funds to build this building according to your plans and specifications as it was proposed to build it; is that right?

Dr. ROGERS. Yes, sir; we do. We have the money. We have specified in advertising the bids one or two alternates which we would not have liked to have taken in case the bids came in over. Fortunately, we won't have to do that.

Senator HILL. You won't have to drop back on that second line?

Dr. ROGERS. That is right.

Senator HILL. In other words, you are going to get the building just as you and the National Library Board thought it should be built and as you proposed it should be built?

Dr. ROGERS. Yes, sir.

Senator HILL. That is certainly good news. I am certainly glad to hear that.

HOUSE ALLOWANCE

Now, as to your operating funds, the Budget and the House allowed you \$40,000 more than you had last year.

Dr. ROGERS. Yes, sir.

Senator HILL. How will that \$40,000 be expended?

Dr. ROGERS. \$29,000 of that will be for increases in personnel costs.

Senator HILL. That is your wage increase?

Dr. ROGERS. Wage increases, increase for steps in grade. There is an extra day in 1960, which is \$4,400. It also includes some \$4,000 for the part-time services of a rare-book craftsman in Cleveland, Ohio, who will work on some of our old and rare materials there.

RENTED SPACE

Senator HILL. Some of your volumes are now stored due to the fact that you didn't have adequate storage space in Washington?

Dr. ROGERS. That is right. There are almost 40,000 volumes in Cleveland in rented space.

Senator HILL. Just simply because you are so crowded in your present quarters that you didn't have room for the books?

Dr. ROGERS. That is right. They were moved out in 1942 at the beginning of the war. When the war ended, there was no place to bring them back to.

Senator HILL. Will this amount, as allowed by the Budget and approved by the House, permit you to carry on adequately this coming fiscal year?

Dr. ROGERS. Yes, sir; I believe it will.

Senator HILL. In other words, you will be able to maintain the standard of operation that you feel this library should have with that amount of money?

Dr. ROGERS. Yes, sir.

Senator HILL. Senator Byrd, have you any questions?

Senator BYRD. No; thank you.

VALUE OF LIBRARY

Senator HILL. I don't know whether you were here or not when the colonel made the statement. This is the greatest medical library in the world. That library has volumes, material, and data—if anything would happen to it through any catastrophe, you simply could not replace it. You could not go back and gather together the marvelous collection of books and data and material you have there.

Is that true, Colonel?

Dr. ROGERS. That is right.

Senator HILL. At long last he will have a fireproof, floodproof, catastrophe-proof building.

Dr. ROGERS. I hope so.

Senator HILL. I use that word "catastrophe" frankly, with my tongue in cheek, because that could cover a multitude of sins, particularly in this present age which we live in now. If we were still back in the old days when the Atlantic and Pacific Oceans were our two best friends, we would have a different situation.

Dr. ROGERS. Yes, sir.

Senator HILL. I never think of that library that I don't think of Dr. John Shaw Billings, because he certainly deserves great credit for building up that library.

Dr. ROGERS. Yes, he does. He was the genius who really made the library.

Senator HILL. He laid the great foundation.

Dr. ROGERS. Yes, he did.

Senator HILL. We should ardently pay tribute to him and to his memory.

Colonel, we certainly want to thank you very much. We are always very happy to have you here and we appreciate this very, very much.

Dr. ROGERS. Thank you, sir.

RETIRED PAY OF COMMISSIONED OFFICERS

STATEMENTS OF ROY L. HARLOW, CHIEF FINANCE OFFICER; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For retired pay of commissioned officers, as authorized by law, and payments under the Uniformed Services Contingency Option Act of 1953, such amount as may be required during the current fiscal year."

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate (indefinite) -----	\$1, 627, 000	\$1, 753, 000	\$1, 753, 000

Obligations by activities

Description	1959 estimate	1960 estimate	House allowance
Retirement payments and survivors' benefits (total obligations)-----	\$1, 627, 000	\$1, 753, 000	\$1, 753, 000

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
12 Pensions, annuities, and insurance claims-----	\$1, 627, 000	\$1, 753, 000	\$1, 753, 000

PREPARED STATEMENT

Senator HILL. Mr. Harlow, you have a prepared statement on the retired pay of commissioned officers of the U.S. Public Health Service, I believe.

(The statement referred to follows:)

STATEMENT OF CHIEF FINANCE OFFICER ON RETIRED PAY OF COMMISSIONED OFFICERS, PUBLIC HEALTH SERVICE

Mr. Chairman and members of the committee, this estimate of \$1,753,000 is for retired pay of commissioned officers of the Public Health Service and for payments to survivors of officers who die while on the retired list. The Commissioned Corps of the Service corresponds to the commissioned corps of the Army, and its members receive the same active duty pay and allowances as officers in corresponding grades of the Army. However, retirement pay of Public Health Service officers is governed by the Public Health Service Act.

Annuities are now being paid to survivors of 17 deceased retired officers who had previously elected a reduced rate of retirement pay under the provisions of Public Law 239, 83d Congress.

As of April 1, 1959, there were 282 officers on the retired list and it is expected that this number will increase to 285 by June 30, 1959. A net increase of 14 officers has been estimated for 1960, bringing the total to 299 by June 30, 1960.

Retired pay of commissioned officers—Summary of changes

	<i>Amount</i>
1959 appropriation (indefinite)-----	\$1, 627, 000
1960 appropriation request (indefinite)-----	1, 753, 000
Net change requested-----	+ 126, 000

	1960 budget estimate	1960 House allowance
Increases for program items to provide for the full year of 1960 the retired payments to officers placed on the retired roll during 1959 and for the net increase of 14 officers estimated to be retired during 1960-----	\$126, 000	\$126, 000
Total change requested-----	126, 000	126, 000

STATUTORY OBLIGATION

Mr. HARLOW. Mr. Chairman, we have furnished a statement for that which is very short, and I think covers the situation as adequately as it could be covered.

This is an indefinite appropriation under which the actual retired pay of the commissioned officers of the Public Health Service is automatically appropriated. There really is nothing to say about it except that it is a completely legal and factual obligation of the Government.

Senator HILL. As you say, it is a statutory obligation.

Mr. HARLOW. Yes, sir.

Senator HILL. There is no discretion in the matter if you are going to meet the terms, conditions, and obligations of the law.

Mr. HARLOW. Yes, sir.

Senator HILL. Are there any questions you would like to ask, Senator Byrd?

Senator BYRD. No, Mr. Chairman.

Senator HILL. Thank you very much, Mr. Harlow.

Mr. HARLOW. Yes, sir.

SALARIES AND EXPENSES

STATEMENTS OF DR. JOHN D. PORTERFIELD, DEPUTY SURGEON
GENERAL; ROY L. HARLOW, CHIEF FINANCE OFFICER; AND
JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For the divisions and offices of the Office of the Surgeon General and for miscellaneous expenses of the Public Health Service not appropriated for elsewhere, including preparing information, articles, and publications related to public health; and conducting studies and demonstrations in public health methods, **[\$5,260,000] \$5,816,000.**"

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate (total obligations).....	\$5, 666, 000	\$5, 816, 000	\$5, 816, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Program by activities:						
1. Public health methods and reports.....	110	\$2, 080, 000	110	\$2, 069, 600	110	\$2, 069, 600
2. Management and central services.....	447	3, 586, 000	467	3, 746, 400	467	3, 746, 400
Total obligations.....	557	5, 666, 000	577	5, 816, 000	577	5, 816, 000

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
Total number of permanent positions.....	557	577	577
Full-time equivalent of all other positions.....	5	3	3
Average number of all employees.....	526	544	544
Number of employees at end of year.....	547	566	566
01 Personal services.....	\$3, 553, 925	\$3, 691, 375	\$3, 691, 375
02 Travel.....	125, 000	127, 900	127, 900
03 Transportation of things.....	12, 300	12, 300	12, 300
04 Communication services.....	204, 000	204, 000	204, 000
05 Rents and utility services.....	5, 800	5, 800	5, 800
06 Printing and reproduction.....	169, 840	171, 340	171, 340
07 Other contractual services.....	1, 304, 800	1, 305, 200	1, 305, 200
08 Supplies and materials.....	52, 700	53, 000	53, 000
09 Equipment.....	34, 150	36, 150	36, 150
11 Grants, subsidies, and contributions.....	200, 535	205, 285	205, 285
15 Taxes and assessments.....	4, 350	5, 050	5, 050
Subtotal.....	5, 667, 400	5, 817, 400	5, 817, 400
Deduct charges for quarters and subsistence.....	1, 400	1, 400	1, 400
Total obligations.....	5, 666, 000	5, 816, 000	5, 816, 000

New positions requested

	Grade	Annual salary
Immediate Office of the Surgeon General:		
Public health program specialist (2).....	GS-14.....	\$22,714
Medical director.....	C.O.....	13,600
Total (3).....		36,314
Division of Finance:		
Cost accountant.....	GS-13.....	9,901
Accounting intern (2).....	GS-7.....	9,984
Accounting intern (2).....	GS-5.....	8,112
Total (5).....		27,997
Division of Personnel:		
Assistant Chief of Division.....	GS-14.....	11,357
Personnel officer.....	GS-12.....	8,341
Personnel officer.....	GS-9.....	5,990
Personnel assistant.....	GS-7.....	4,992
Clerical assistant (3).....	GS-4.....	11,295
Senior grade (2).....	C.O.....	21,357
Total (9).....		63,332
Public inquiries and information:		
Program publication specialist.....	GS-13.....	9,901
Clerical assistant.....	GS-6.....	4,493
Clerical assistant.....	GS-5.....	4,056
Total (3).....		18,450
Total new position, all activities (20).....		146,093
Deduct lapses.....		18,523
Net increase for new positions.....		127,570

Summary of changes

	Positions	Amount
1959 actual appropriation.....	557	\$5,260,000
1959 supplemental appropriation.....		406,000
Total appropriation.....	557	5,666,000
Deduct nonrecurring temporary employment.....		-13,000
Revised 1959 base.....	557	5,653,000
1960 appropriation request.....	577	5,816,000
Net change requested.....	+20	+163,000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
INCREASES				
For mandatory items:				
Extra days' pay (261 days in 1959 and 262 days in 1960).....		\$11,300		\$11,300
For program items:				
Management and central services:				
Immediate Office of the Surgeon General.....	3	39,220	3	39,220
Division of Finance.....	5	29,125	5	29,125
Division of Personnel.....	9	55,875	9	55,875
Public inquiries and information.....	3	19,500	3	19,500
Other central services and contingent items.....		7,980		7,980
Total change requested.....	20	163,000	20	163,000

PREPARED STATEMENT

Senator HILL. Dr. Porterfield, we would be happy to have you address yourself to the item "Salaries and expenses."

Dr. PORTERFIELD. Thank you, Senator. A statement was prepared which was submitted for the record.

(The statement referred to follows:)

STATEMENT OF DEPUTY SURGEON GENERAL ON "SALARIES AND EXPENSES, PUBLIC HEALTH SERVICE"

Mr. Chairman and members of the committee, you are considering at the close of the Public Health Service presentation the matter of the fourth bureau of the Public Health Service, the Office of the Surgeon General, of which by statute I am Chief. This Bureau is represented in the budget by the account entitled "Salaries and Expenses, Public Health Service."

The title is prosaic as are perhaps the functions of the bureau in great part. But these are functions which are essential to all of the other operations of the Public Health Service. From the technical assistance programs to help communities develop better programs for the health of the aged or to assist States in establishing competent health units for radiation protection, through the evolution of improvements in the provision of good medical care to Indians to the meeting of all the supportive necessities in setting up a new field research party in the tropical zones, the detailed affairs of the Service require the centralized services provided by the working units of the Office of the Surgeon General.

These services are made available from the Divisions of Administrative Services, Finance, and Personnel, whose names describe their necessary functions; from the Division of Public Health Methods wherein is located the vitally important staff for Service planning and program evaluation; and from the Immediate Office of the Surgeon General, where policy decisions of weight and moment are the daily rule.

This Bureau is not of itself an operating Bureau. It does, however, presently contain—as in other temporary cases from time to time—the national health survey. Without these occasional glamorous members, the Office of the Surgeon General would have little of dramatic appeal—as is common and fitting for the men behind the man behind the gun.

A request in the amount of \$5,816,000 is made for this appropriation for fiscal year 1960. This is an increase of \$150,000 over the present year's allowance, a modest step toward improvement in management and central services. The rapid growth of our health activities during recent years has far outstripped these supporting and directing services. Whether figured in positions or dollars or diversity and complexity of programs served, the ratio of central services to operating programs has dwindled from the par value of 1950 to approximately half that level in 1958. As one who has come from years of service in operating programs, I am not partial to excessive administrative costs. But an army, even or perhaps especially a health army, is no more effective than its central command staff. The conservative remedy proposed for 1960 would provide 20 additional positions, 6 in the immediate Office of the Surgeon General, 9 in the Division of Personnel, and 5 in the Division of Finance.

The national health survey, you will remember, was created by enactment of Public Law 84-652 when the Congress determined that the latest information then available on the health characteristics of the American people was seriously out of date and that contemporary continuing information on such matters was urgently required for various health planning and research purposes.

In fiscal year 1957, the survey designed the main features of the continuing program and organized the initial work in data collection, particularly the household interview phase. All of fiscal year 1958 was occupied with data collection from a representative sample of households. In the present fiscal year, the analyses of much of these data are being completed and the long-awaited and eagerly sought reports are being published in quick succession. I have brought with me today copies of these first reports for your perusal. They recount the current utilization of physicians, of dentists, of hospitals and the present levels of personal injuries, disabilities and acute disease conditions. These reports are being widely used in the Public Health Service, in Government and by health agencies throughout the country. Many previous assumptions have been corrected by this more precise and timely information. For example, we have learned that there are

many more personal injuries occurring in our population than we had suspected. We have discovered the changing ratios of home and office visits by physicians which will give a more accurate basis for computing not only cost-of-living indexes but even financial estimates of health insurance plans. The number of current admissions to hospitals and the average length of stay by age group is of direct concern to many groups including committees of this Congress who will be reviewing legislation on this subject.

A special use of the survey has been the charting of the recent Asian influenza epidemic in this country. Survey material is presently being used by the Communicable Disease Center in evaluating this epidemiologic experience. So each year do we expect these fruits of wise legislation to be used for the guidance of many health endeavors. In a very short time we have moved from a position where most of our national health figures were obsolete to the advantage of having a rapidly improving solid foundation for the planning and administration of health work. In 1960 we propose to continue data collection, analyses and publication, extending it to other topics, and increasing the range of data tabulated. The amount requested for the National Health Survey for 1960 is identical with that available in 1959, less a savings of some \$10,000 for nonrecurring expenses.

I hope that in these few minutes I have been able to give you just a glimpse of the earnestness—and the pride—with which the people of the Office of the Surgeon General pursue their ordinarily hidden but essential work. If there are any questions, I shall be very pleased to try to answer them with the help of Mr. Harlow, our Finance Officer.

NATIONAL HEALTH SURVEY

Dr. PORTERFIELD. I would like to add a few remarks to that statement and to repeat what is in that statement, that this account of the Public Health Service is perhaps the least glamorous one to defend. This is the work that is done back home while all of the more intriguing and dramatic operations of the Service are carried out more directly in front of the people.

The other day, you already had some discussion of the National Health Survey which is contained in this account and constitutes a major share of it.

I have brought along one set of the publications which have been issued to date by the National Health Survey; three of them on how a survey is conducted and eight so far on the data which has been collected and the analysis of this data.

For the rest of the items in the "Salaries and expenses, Public Health Service," we are asking only a modest increase in the appropriation for management and central service, constituting 20 positions, which is divided amongst increases in the Division of Personnel, in the Division of Finance, and in the immediate Office of the Surgeon General.

Even with these increases, we are being very conservative in the ratio between the volume size of our programs, whether measured by dollars or by positions, and the amount of central office administration, policy development and determination, and accounting of funds and actions that must be done.

I would be very pleased to answer any questions on any part of this.

Senator HILL. As you have said earlier in the testimony when General Burney was here, and afterwards in connection with Dr. Shannon's testimony, we had some discussion of your health survey.

Dr. PORTERFIELD. Yes, sir.

Senator HILL. Of the amount recommended by the budget, how much do we have for this health survey?

Dr. PORTERFIELD. The total amount for the National Health Survey is \$1,476,925. That is about three-quarters of the total amount for public health methods and reports.

Senator HILL. How does that amount compare with what you contemplated at the time this survey was authorized?

Dr. PORTERFIELD. At the time that the survey was in its earliest operation, sir, we had contemplated somewhat more than this in one particular item at least. This covers all that we had previously anticipated in the health interview survey and in the publication and analysis of data.

This does not contemplate at the present time any progress from our three pilot studies in the health examination survey into continuing this as a regular part of the National Health Survey.

Senator HILL. In other words, outside of those three pilot surveys of what you referred to the examination survey, you have to have additional funds; is that right?

Dr. PORTERFIELD. That is right.

Senator HILL. How much would you need?

Mr. HARLOW. \$313,500 was our estimate of additional funds for that purpose, Senator.

Senator HILL. That was the amount that the Department requested from the Budget for the examination phase of the survey; is that right?

Mr. HARLOW. Yes, sir.

Senator HILL. You spoke of your three pilot studies, Doctor, on your health examination survey. Is there included in this examination part of the survey any study or any examination with reference to tuberculin tests?

Dr. PORTERFIELD. No, sir; there is not. That was not included in the items to be covered in the health examination.

Senator HILL. In other words, there is no examination study now of anything with reference to tuberculin tests?

Dr. PORTERFIELD. That is correct.

ESTIMATE FOR TUBERCULIN TEST

Senator HILL. Have you any estimate, Mr. Harlow, of what the examination of the tuberculin test would amount to? Have you any breakdown on that?

Mr. HARLOW. No, sir, Senator; but I am sure we could supply that.

Senator HILL. Would you supply that in terms of how much the appropriation would amount to?

Mr. HARLOW. Yes, sir.

(The information referred to follows:)

ADDITIONAL COSTS OF ADDING TUBERCULIN TEST PROCEDURES TO THE NATIONAL HEALTH SURVEY PROGRAM FOR FISCAL YEAR 1960

The provisional design for the health examination survey as developed and field tested in fiscal 1959 did not include a test for tuberculin sensitivity primarily because it would require a revisit to the examinee 48-72 hours after administration of the test. The revisit would add extra expense to a health examination originally designed to be completed in one visit.

For fiscal 1960, and on the basis of the two examination teams working from place to place throughout the country, the extra cost for adding the tuberculin test to the health examination survey is estimated at \$110,200. This estimate includes an additional member of each planned examination team to administer the test injection and complete the related clinical information sheets; the establishment of a new followup procedure 48-72 hours after the test injection to read the

test findings—a procedure which, for each team, requires two trained technical observers; travel costs for the followup procedures; an additional statistician for the computation of results and transmittal of readings to the examinees' physicians; and related costs of supplies, equipment, retirement, and taxes.

Senator HILL. Senator Byrd, do you have any questions?
Senator BYRD. I have no questions, Mr. Chairman.

ST. ELIZABETHS HOSPITAL
SALARIES AND EXPENSES

STATEMENTS OF DR. EVELYN B. REICHENBACH, FIRST ASSISTANT
PHYSICIAN; F. M. HALL, BUDGET OFFICER; AND JAMES F.
KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE
SALARIES AND EXPENSES

"For expenses necessary for the maintenance and operation of the hospital, including [purchase of one passenger motor vehicle,] clothing for patients, and cooperation with organizations or individuals in the scientific research into the nature, causes, prevention, and treatment of mental illness, [\$3,154,000] \$3,715,000."

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Direct appropriation.....	\$3, 407, 000	\$3, 715, 000	\$3, 715, 000
Reimbursements:			
Other accounts.....	1, 125, 050	1, 217, 375	1, 217, 375
Non-Federal sources.....	12, 558, 950	13, 297, 625	13, 297, 625
Total.....	17, 091, 000	18, 230, 000	18, 230, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Operation and maintenance of hospital.....	2, 740	\$16, 682, 250	2, 990	\$17, 819, 985	2, 990	\$17, 819, 985
2. Operation of farm.....	8	37, 560	8	37, 650	8	37, 650
3. Operation of cafeteria.....	14	103, 270	14	104, 265	14	104, 265
4. Training program.....	¹ 11	267, 920	¹ 11	268, 100	¹ 11	268, 100
Total obligations.....	2, 773	17, 091, 000	3, 023	18, 230, 000	3, 023	18, 230, 000

¹ Permanent classified positions only. Amounts shown also cover unclassified trainees (interns, residents etc.) totaling 152 in 1959 and 1960.

Obligations by objects

	1959 estimate	1960 estimate	House allow- ance
Total number of permanent positions.....	2, 773	3, 023	3, 023
Full-time equivalent of all other positions.....	89	89	89
Average number of all employees.....	2, 736	2, 952	2, 952
Number of employees at end of year.....	2, 811	3, 027	3, 027
01 Personal services.....	\$12, 375, 665	\$13, 314, 535	\$13, 314, 535
02 Travel.....	4, 400	4, 400	4, 400
03 Transportation of things.....	6, 300	6, 300	6, 300
04 Communication services.....	20, 770	21, 520	21, 520
05 Rents and utility services.....	133, 530	154, 930	154, 930
06 Printing and reproduction.....	16, 000	16, 000	16, 000
07 Other contractual services.....	130, 585	138, 985	138, 985
08 Supplies and materials.....	3, 478, 150	3, 548, 330	3, 548, 330
09 Equipment.....	210, 000	252, 000	252, 000
11 Grants, subsidies, and contributions: Contributions to re- tirement fund.....	730, 000	787, 400	787, 400
13 Refunds, awards, and indemnities.....	4, 400	4, 400	4, 400
15 Taxes and assessments.....	7, 500	7, 500	7, 500
Subtotal.....	17, 117, 300	18, 256, 300	18, 256, 300
Deduct charges for quarters, subsistence, and laundry.....	-26, 300	-26, 300	-26, 300
Total obligations.....	17, 091, 000	18, 230, 000	18, 230, 000

New positions requested

	Grade	Number of positions	Annual salary
Operation and maintenance of hospital:			
Medical officer.....	GS-14.....	1	\$11,606
Do.....	GS-13.....	3	30,450
Psychologist.....	GS-12.....	1	8,341
Medical officer.....	GS-12.....	2	17,638
Chaplain.....	GS-11.....	1	7,030
Psychologist.....	GS-11.....	2	14,060
Nurse supervisor.....	GS-11.....	1	7,030
Do.....	GS-10.....	2	13,020
Assistant nurse supervisor.....	GS-9.....	4	23,960
Dental officer.....	GS-9.....	1	5,990
Dietitian.....	GS-9.....	1	5,990
Personnel assistant.....	GS-9.....	1	5,990
Social worker.....	GS-9.....	1	5,990
Occupational therapist.....	GS-8.....	1	5,470
Ward instructor.....	GS-8.....	1	5,470
Administrative assistant.....	GS-7.....	1	4,992
Contact dietitian.....	GS-7.....	1	4,992
Medical records librarian.....	GS-7.....	1	4,992
Nurse.....	GS-7.....	15	74,880
Occupational therapist.....	GS-7.....	2	9,984
Medical technician (Lab.).....	GS-6.....	2	8,986
Gardener.....	GS-5.....	1	4,056
Medical technician.....	GS-5.....	1	4,056
Nursing assistant.....	GS-5.....	6	24,336
Payroll clerk.....	GS-5.....	1	4,056
Recreational therapist.....	GS-5.....	3	12,168
Secretary.....	GS-5.....	1	4,056
Clerk-stenographer.....	GS-4.....	2	7,530
Clerk.....	GS-4.....	3	11,295
Dental hygienist.....	GS-4.....	1	3,765
Gateman.....	GS-4.....	3	11,295
Nursing assistant.....	GS-4.....	25	94,125
Personnel clerk.....	GS-4.....	1	3,765
Beautician.....	GS-3.....	2	7,030
Clerk-typist.....	GS-3.....	2	7,030
Medical clerk (Lab.).....	GS-3.....	2	7,030
Medical records clerk.....	GS-3.....	4	14,060
Nursing assistant.....	GS-3.....	55	193,325
Occupational therapy aide.....	GS-3.....	3	10,545
Recreation aide.....	GS-3.....	2	7,030
X-ray clerk.....	GS-3.....	1	3,515
Nursing assistant.....	GS-2.....	5	16,330
Carpenter.....	Ungraded.....	1	4,576
Cook.....	do.....	4	14,872
Electrician.....	do.....	1	4,181
Electronic technician.....	do.....	1	5,096
Grounds maintenance worker.....	do.....	1	3,536
Head housekeeper.....	do.....	2	8,362
Housekeeping aide (ward).....	do.....	37	106,856
Kitchen helper.....	do.....	26	64,054
Operating engineer.....	do.....	1	4,576
Painter.....	do.....	1	4,493
Steamfitter.....	do.....	1	4,576
Truckdriver.....	do.....	1	3,869
Waitress.....	do.....	4	10,816
Operation and maintenance of hospital.....		250	967,122
Other activities.....		0	0
Total new positions, all activities.....		250	967,122

Summary of changes

	Positions	Amount
1959 actual appropriation.....	553	\$3, 186, 000
1959 supplemental appropriation.....		221, 000
Total appropriation.....	553	3, 407, 000
1959 estimated reimbursements.....	2, 220	13, 684, 000
Total 1959 base.....	2, 773	17, 091, 000
1960 appropriation request.....	616	3, 715, 000
1960 estimated reimbursements.....	2, 407	14, 515, 000
Total 1960 estimate.....	3, 023	18, 230, 000
Net change requested:		
Direct appropriation.....	+63	+308, 000
Reimbursements.....	+187	+831, 000
Total net change.....	+250	+1, 139, 000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
INCREASES				
For mandatory items:				
Annualization costs for 56 additional positions authorized in 1959.....		\$25, 560		\$25, 560
Extra days pay in 1960.....		32, 910		32, 910
Subtotal.....		58, 470		58, 470
For program items:				
Staffing and utilities (gas, electric, telephones) for opening and operation of new Maximum Security Building.....	188	733, 650	188	733, 650
Additional medical and nursing positions for partial relief of understaffing in other hospital areas.....	62	229, 200	62	229, 200
Increased requirements for supplies, equipment, and minor building repairs.....		117, 680		117, 680
Total change requested.....	250	1, 139, 000	250	1, 139, 000

APPROPRIATION ESTIMATE

MAJOR REPAIRS AND PRESERVATION OF BUILDINGS AND GROUNDS

"For miscellaneous construction, alterations, repairs, and equipment, on the grounds of the hospital, including preparation of plans and specifications, advertising, and supervision of construction, **[\$87,000]** \$330,000, to remain available until June 30, **[1960]** 1961."

Amounts available for obligation

	1959 appropriations	1960 budget to Congress	1960 House allowance
Appropriation.....	\$87, 000	\$330, 000	\$330, 000
Unobligated balance from prior years.....	33, 093	0	0
Total.....	120, 093	330, 000	330, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Building repairs and improvements.....	-----	\$55,054	-----	\$180,000	-----	\$180,000
Ground maintenance and improvements.....	-----	0	-----	30,000	-----	30,000
Utility facilities, repairs, and improvements.....	-----	62,347	-----	120,000	-----	120,000
Total obligations.....	-----	117,401	-----	330,000	-----	330,000
Unobligated balance (reserve for savings).....	-----	2,692	-----	0	-----	0
Total obligations and balances.....	-----	120,093	-----	330,000	-----	330,000

Obligations by objects

	1959 estimate	1960 estimate	House allowance
02 Travel.....	\$150	\$100	\$100
06 Printing and reproduction.....	600	5,000	5,000
07 Contractual services.....	59,899	152,000	152,000
10 Lands and structures.....	56,752	172,900	172,900
Total obligations.....	117,401	330,000	330,000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	-----	\$87,000
Deduct nonrecurring fiscal year 1959 projects:		
1. Replacement of roof, Center Building.....	-----	-52,000
2. Rewiring and extension of electrical facilities in patient buildings.....	-----	-35,000
Revised 1959 base.....	-----	0
1960 appropriation request.....	-----	330,000
Net change requested.....	-----	+330,000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
INCREASES				
For program items:				
1. Replacement of guttering and repairs to roofing on 2 patient buildings.....	-----	\$30,000	-----	\$30,000
2. Replacement of elevators, Charles H. Nichols Building.....	-----	125,000	-----	125,000
3. Sprinkler system survey.....	-----	25,000	-----	25,000
4. Resurfacing of roads.....	-----	30,000	-----	30,000
5. Rewiring and extension of electrical facilities in patient buildings.....	-----	45,000	-----	45,000
6. Replacement of electric feeders to east side buildings.....	-----	60,000	-----	60,000
7. Repairs to railroad bed.....	-----	15,000	-----	15,000
Total change requested.....	-----	330,000	-----	330,000

PREPARED STATEMENT BY DR. OVERHOLSER

Senator HILL. Dr. Evelyn Reichenbach, we are very glad to have you.

Dr. REICHENBACH. Thank you, Mr. Chairman.

Senator HILL. You are the first assistant physician to the Director?

Dr. REICHENBACH. Yes; I am. I am sorry that Dr. Overholser cannot be here.

Senator HILL. You tell him that we are sorry he could not be here. We would like to have you proceed in your own way.

Dr. REICHENBACH. This statement was prepared by Dr. Overholser and I would request permission to read it.

Senator HILL. In other words, this was written by Dr. Overholser and you would like to read it?

Dr. REICHENBACH. Yes, sir.

I have prepared opening statements covering in some details the program proposals and budget requests of St. Elizabeths Hospital as submitted to and approved by the House of Representatives for fiscal year 1960. With your permission, I should like to insert these statements in the record in full and summarize them briefly at this time.

Senator HILL. They will appear in the record in full at this point. (The statements referred to follow:)

STATEMENT OF SUPERINTENDENT OF ST. ELIZABETHS HOSPITAL ON SALARIES AND EXPENSES, ST. ELIZABETHS HOSPITAL

Mr. Chairman and members of the committee, I should like, for the benefit of the committee, to preface my statement on the 1960 appropriation requests of St. Elizabeths Hospital with a few facts on the history and functions of the Hospital.

HISTORY AND FUNCTIONS

St. Elizabeths Hospital was established by the act of March 3, 1855, as the Government Hospital for the Insane. It became St. Elizabeths Hospital by the act of July 1, 1916. The hospital provides care and treatment for several classes of mentally ill persons, including those residing in the District of Columbia, beneficiaries of the Veterans' Administration, Public Health Service, insane persons charged with or convicted of crimes in the U.S. courts, including the courts of the District of Columbia, certain U.S. citizens found insane in Canada, the Canal Zone, and the Virgin Islands, certain Foreign Service personnel, and members of the military admitted prior to July 16, 1946.

POLICIES AND PROGRAMS

The statutory duty of St. Elizabeths Hospital is to furnish "the most humane care and enlightened curative treatment" to the mentally ill. The hospital's policies and programs are all directed to this end. Fulfillment of the obligation, however, has become exceedingly difficult in recent years, due primarily to the inadequacy of staffing levels. Additional funds requested in the budget estimates now before the committee represent an effort on the part of the hospital to acquire some of the increases in manpower and material needed to accomplish the objective.

FINANCING OF OPERATIONS

Funds for the operation of the hospital are obtained through a direct appropriation covering most of the Federal beneficiaries and by reimbursements for care rendered other groups, principally residents of the District of Columbia.

DISTRICT OF COLUMBIA PARTICIPATION IN BUDGET FORMULATION

It would seem pertinent at this point to advise the committee that the District of Columbia, as a major source of revenue in the financing of hospital operations, has participated in the formulation of the 1960 budget requests of St. Elizabeths Hospital. The hospital is pleased to report that the District recognizes the need and approves of the increases requested by St. Elizabeths in 1960.

INCREASES, 1960

The 1960 budget provides for a total increase of \$1,139,000 (\$308,000 in direct appropriation and \$831,000 in reimbursements) over funds for the current fiscal year to be derived from the 1959 appropriation, a proposed supplemental for

the same year, and anticipated reimbursements. In addition to mandatory increases for annualization of positions new in 1959 and increased salary payments resulting from the extra day (262d) in 1960, the budget requests provide for the following program increases:

1. Additional staff and utilities for the opening and operation of the new maximum security building.
2. A minimal part of an urgently needed increase in personnel for other understaffed hospital areas.
3. Relatively minor increases in supply funds to provide adequate patient food at current price levels and to improve the hospital's drug, medicine, and medical supply program.
4. Funds to reduce a sizable backlog of equipment replacement needs and to meet substantially higher current prices of equipment items.

PATIENT LOAD

Requirements for 1960 are based on an anticipated average patient load of 6,920, a slight decrease from the level projected for the current fiscal year. The patient load estimate reflects the expected continuation of the gradual decrease of "in the house" patient population which the hospital has been experiencing for the past several years. There are indications, however, that this trend is leveling off, the decrease in the past fiscal year having amounted to less than one-half of 1 percent of the total population.

PERSONAL SERVICES

St. Elizabeths Hospital has long occupied a position of prominence in the psychiatric field, but this position, as well as the general welfare of its patients, is in jeopardy due to an insufficiency of staff adequately to carry on modern treatment programs which hold so much hope for mental patients. The 1960 budget provides for staff increases which will alleviate partially this situation and assist the hospital in its efforts to provide adequate standards of care and treatment for its patients.

Many factors contribute to the staffing problems of St. Elizabeths. Advances in psychiatric knowledge, improvements in treatment techniques, and the use of modern drugs, for example, have all resulted in sharply increased demands on staff time. Patients previously receptive to little more than custodial care have become responsive to active therapy. The provision of active therapy programs, however, requires substantially more staff than that required in the furnishing of custodial care. Another important factor contributing heavily to staffing problems is the increasing demands for nursing services to a growing geriatric patient population, which now includes approximately 40 percent of the total patient load of the hospital. The increasing age of these patients is accompanied by the problem of providing more on-the-ward care for patients who become less capable of doing for themselves. The feeding, bathing, dressing, lifting, and moving of such patients has already required and will continue to require, a larger number of ward employees.

Staffing requirements of St. Elizabeths Hospital have been studied extensively by the hospital staff and by outside consultants. The report of the consultant group confirmed in general the findings of the hospital study which showed the need for personnel increases approximating 60 percent. In recognition of the obvious difficulties, particularly budgetary implications, attached to an increase of the magnitude indicated, the hospital proposes in the 1960 budget additional staff in sufficient numbers to provide only for adequate staffing levels in the new maximum security building and for some relief in other hospital areas where current shortages are most serious.

The new maximum security building, currently nearing completion, will be ready for occupancy early in fiscal year 1960. In contrast to the overcrowded and antiquated facility which it replaces, the new building provides the much needed space and physical facilities required for the proper care and treatment of this special category of patients. Effective use of the new building, however, is dependent upon the availability of sufficient personnel to give patients the full benefits of the facilities provided. The hospital has determined the total staffing requirements of the maximum security building to be 268 positions. Of this number, 80 positions will be made available by reassignment. An increase of 188 positions will thus be required in 1960 for adequate staffing and effective utilization of this excellent facility.

Staffing deficiencies in areas other than the maximum security building are widespread—practically every section, service, and unit lacking sufficient personnel effectively to discharge its functions. In many areas understaffing is critical and in some, increases are mandatory in order to retain accreditation under the requirements of the Joint Commission on Accreditation of Hospitals. A minimal increase of 62 medical and nursing positions, including 12 required for accreditation purposes, is requested in 1960 to provide some immediate relief in those areas where current shortages are most serious. The requested increase represents approximately 4 percent of total needs.

AVERAGE EMPLOYMENT

Estimated average employment in 1960, after lapses for anticipated delays in the filling of new positions and the absorption of within-grade salary advancement costs, is 2,952, a net increase of 216 over the level estimated for the current fiscal year. This will result in a patient-to-employee ratio of 2.3 to 1, a conservative ratio.

STATEMENT OF SUPERINTENDENT OF ST. ELIZABETHS HOSPITAL ON MAJOR REPAIRS AND PRESERVATION OF BUILDINGS AND GROUNDS, ST. ELIZABETHS HOSPITAL

Mr. Chairman and members of the committee, major repairs and preservation of buildings and grounds appropriations provide funds for a continuous program of repair and restoration of hospital facilities. Appropriations for this purpose have averaged over \$342,000 annually for the past 10 years. Funds requested for 1960 total \$330,000, an increase of \$243,000 over the amount appropriated in 1959 but slightly under the average annual major repair costs of the hospital.

Seven relatively small but urgently needed projects are proposed for undertaking in fiscal year 1960:

1. Replacement of guttering and repairs to roofing on two patient buildings.
2. Replacement of elevators, Charles H. Nichols Building.
3. Sprinkler system survey.
4. Resurfacing of roads.
5. Rewiring and extension of electrical facilities in patient buildings.
6. Replacement of electric feeders to east side buildings.
7. Repairs to railroad roadbed.

In accordance with the provisions of Public Law 472, 83d Congress, an estimated amount of \$240,000 will be collected from the District of Columbia and deposited into the Treasury to the credit of miscellaneous receipts as the District's share of major repair costs at St. Elizabeths Hospital for 1960.

District officials, having participated in hearings and discussions on the formulation of the 1960 budget, concur in the urgency of the proposed projects.

PROGRAMS AND POLICIES

Dr. REICHENBACH. The programs and policies of St. Elizabeths Hospital are directed toward the fulfillment of its statutory responsibility of furnishing the most humane care and enlightened curative treatment to the mentally ill. Proposals made in the 1960 budget will help overcome certain obstacles and assist greatly in the achievement of these goals.

I believe it pertinent at this point to inform the committee that the District of Columbia, a major source of revenue in the financing of hospital operations, has participated in hearings and discussions on the formulation of the 1960 budget of St. Elizabeths Hospital and concurs fully with the increases which it provides.

The 1960 budget for salaries and expenses provides for an increase of \$308,000 in direct appropriation and \$831,000 in reimbursements, a total of \$1,139,000 over the amounts anticipated in the current fiscal year.

Senator HILL. Doctor, what are those reimbursements?

Dr. REICHENBACH. Principally from the District of Columbia.

Senator HILL. That is what I thought, but I wanted to make that clear for the record.

Dr. REICHENBACH. Shall I proceed?

Senator HILL. Yes, you may proceed.

Dr. REICHENBACH. The additional funds are required principally for increases in personnel to staff the new maximum security building and provide some relief for other seriously understaffed areas of the hospital.

The inadequacy of staffing levels is the major problem confronting the hospital today and steps must be taken to alleviate this if the hospital is to provide reasonably adequate standards of care and treatment.

MANDATORY ITEMS

Specifically, the budget covers certain mandatory items such as additional salary payments accruing because of the extra day in 1960, and provides for the following program increases:

1. Additional staff and utilities for the opening and operation of the new maximum security building.

2. A minimal part of an urgently needed increase in personnel for other understaffed hospital areas.

3. Relatively minor increases in supply funds to provide adequate patient food at current price levels and to improve the hospital's drug, medicine, and medical supply programs.

4. Funds to reduce a sizable backlog of equipment replacement needs and meet the substantially higher current prices of equipment items.

The estimates, based on an anticipated average daily patient load of 6,920, result in a patient-day cost of \$7.17 for care and treatment.

MAJOR REPAIRS AND PRESERVATION OF BUILDINGS AND GROUNDS

The hospital conducts, with funds appropriated under this heading, a continuous program of repair and restoration of its facilities. Funds requested for this purpose in 1960 total \$330,000, an increase of \$243,000 over the amount available in the current fiscal year, but slightly less than the average annual cost of major repair programs for the past 10 years.

In accordance with the provisions of Public Law 472, 83d Congress, the District of Columbia will pay approximately \$240,000 as its share of the cost of the seven relatively small but urgently needed projects proposed for 1960. The amount so collected from the District will be deposited as miscellaneous receipts in the Treasury.

I have attempted to outline briefly the principal problems and budget proposals for fiscal year 1960. Approval of the proposed budget will support the hospital's efforts to provide minimum acceptable treatment programs for its patients.

I appreciate the opportunity of discussing our needs with the committee, and I shall be very happy to answer any questions.

Senator HILL. Doctor, I notice your statement on top of page 2 states the inadequacies of staffing levels is the major problem confronting the hospital today and steps must be taken to alleviate this if the hospital is to provide reasonably adequate standards of care and treatment.

PROGRESS UNDER REQUESTED FUNDS

Then you highlight some of the major things of expenditure in the budget. What I would like to know is so far as this budget recommendation and the amount approved by the House is concerned, how much progress do you feel these funds will permit you to make toward providing a reasonably adequate standard of care and treatment?

Dr. REICHENBACH. I think this is a good step forward. The maximum security building is being staffed up to the level required to meet the standards. Then each year we have to train these people as we bring them in. We can only train so many within a year. This is a definite step forward and we are quite satisfied.

Senator HILL. You are quite satisfied with it?

Dr. REICHENBACH. Yes, sir.

Senator HILL. When Dr. Shannon, who is the Director of the Institutes of Health, as you know, and Dr. Felix, who is head of the Mental Health Institute, were here with us last week, we had some discussion as to the operations of that part of the hospital in which they are cooperating with you and in which you are engaged in a joint enterprise.

Dr. REICHENBACH. Yes, sir.

Senator HILL. That seems to be quite a problem.

Dr. REICHENBACH. It is. It is very complicated. Dr. Overholser and Dr. McGinnis and Mr. Kelly have done quite a great deal of work and they are still working on the problem.

Senator HILL. Is there anything in particular that you would like to bring to the attention of the committee?

Dr. REICHENBACH. Not at the present time, unless Mr. Kelly wishes to say something at this time.

Mr. KELLY. You recall I talked to that the other day.

Senator HILL. I remember. You do feel that this budget will make it possible so far as the overall operation of the hospital and the care of patients is concerned, it is a definite step forward?

Dr. REICHENBACH. Yes, I do; definitely.

Senator HILL. Is Dr. Overholser sick?

Dr. REICHENBACH. He had to have some studies made and he had to go to the hospital for them. He is ambulatory, but he had to have some studies made.

Senator HILL. You tell him we miss not having him with us because we hold him in very high esteem.

Dr. REICHENBACH. I will.

Senator HILL. We understand fully and we hope he will soon be up to par and you made a very fine representative for him.

Dr. REICHENBACH. Thank you so much.

Senator JILL. We are certainly obliged to all of you.

Dr. REICHENBACH. Thank you so much.

SOCIAL SECURITY ADMINISTRATION

STATEMENT OF WILLIAM L. MITCHELL, COMMISSIONER OF SOCIAL SECURITY; ACCOMPANIED BY JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

PREPARED STATEMENT

Senator HILL. We are glad to have Mr. William L. Mitchell, the new Commissioner of Social Security. Mr. Mitchell, did you care to make a statement?

Mr. MITCHELL. Thank you, Mr. Chairman. I have a prepared statement which I would like to file for the record.

Senator HILL. Very well, Mr. Mitchell. Your statement will appear in full at this point in the record.

(The statement referred to follows:)

STATEMENT OF COMMISSIONER OF SOCIAL SECURITY

My name is William L. Mitchell. Although I have appeared before this committee for many years, this is the first time I have done so in the capacity of Commissioner of Social Security, having only been appointed to this position rather recently. As you know, Mr. Schottland, my predecessor, resigned at the end of December to become dean of the graduate school for advanced studies in social welfare at Brandeis University.

With your permission, I would like to make a few general statements in connection with the detailed consideration which you will give to the budget requests of the various bureaus of the Social Security Administration. The individual bureau directors will present the details of the estimates for your consideration. However, I shall be available for any questions which the committee might have in the course of the hearings. Right now I would like to review some of the more significant developments which have occurred since our last appearance before the committee.

RESPONSIBILITIES OF SOCIAL SECURITY ADMINISTRATION

The Social Security Administration through four operating bureaus carries responsibility for the proper and efficient administration of the old-age, survivors, and disability insurance program, the Federal-State public assistance programs for the needy, the programs for children under the grants for maternal and child health and related services, and the supervision of federally chartered credit unions. The Commissioner is also responsible on a continuing basis for the supervision of the Appeals Council which makes final administrative decisions on disputed old-age, survivors, and disability insurance claims; direction of the Office of the Actuary; and serves as secretary to the board of trustees of the old-age and survivors insurance trust fund and the Federal disability insurance trust fund. The Commissioner also serves in such capacities as Chairman of the Advisory Council on Social Security Financing and Chairman of the newly created Advisory Council on Public Assistance established by the last Congress.

THE SOCIAL SECURITY ACT AMENDMENTS OF 1958

During the closing days of the last session, Congress enacted into law significant and far-reaching changes in the programs of old-age, survivors, and disability insurance, public assistance, and maternal and child health and welfare.

MAJOR CHANGES IN OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM

(1) The new legislation increased the monthly benefit payments of about 12½ million old-age, survivors, and disability insurance beneficiaries already on the rolls by an average of 7 percent, and established a new and higher schedule of benefit payments for those who come on the rolls in the future.

(2) Maximum earnings taxable and creditable toward benefits were raised from \$4,200 to \$4,800 per annum and a new schedule of contribution rates was established.

(3) Monthly benefits were provided for dependents of disability insurance beneficiaries similar to those provided to dependents of old-age insurance beneficiaries. The first such payments were made for the month of September 1958.

(4) The work requirements both for cash disability benefits and disability freeze were modified to facilitate eligibility of persons affected by a gradual onset of disability.

(5) The retirement test was modified slightly. A beneficiary may now earn up to \$100 a month (the figure was formerly \$80) without having his benefit for that month suspended even though his annual earnings as an employee substantially exceed \$1,200.

(6) Dependent parents of a deceased worker may be eligible for benefits even though a widow or dependent child of the deceased worker also survives.

MAJOR CHANGES IN PUBLIC ASSISTANCE PROGRAM

(1) Federal financial participation in State expenditures for assistance are now related in part to the fiscal capacity of each State.

(2) The Federal amount of assistance expenditures is now related to a single average expenditure per recipient that includes both money payments and medical care payments.

(3) The dollar limitation on the total amount of Federal payment for public assistance in Puerto Rico and the Virgin Islands was increased and the public assistance program was extended to Guam.

(4) Provision was made for an Advisory Council on Public Assistance to review the program and report its findings and recommendations by January 1, 1960.

MAJOR CHANGES IN THE MATERNAL AND CHILD HEALTH AND CHILD WELFARE PROGRAMS

(1) The amount authorized to be appropriated for grants for each of the three programs was increased \$5 million.

(2) Grants are made available to Guam effective July 1, 1959.

(3) Services are made available to urban children on the same basis as rural children under the child welfare program.

(4) The formula for the allotment of Federal Child Welfare Service funds was revised to take into account the fiscal capacities of the States, and matching of Federal funds under this program is required beginning with the fiscal year 1960. Also, the reallocation of Federal Child Welfare Service funds is authorized.

(5) An Advisory Council on Child Welfare Services was established for the purpose of advising the Secretary in connection with the child welfare provisions of the amendments.

PROGRAM TRENDS

Old-age, survivors, and disability insurance

The increased benefit amounts authorized by the 1958 amendments to the Social Security Act are effective for January 1958. The January benefit checks that were mailed out to over 12 million old-age, survivors, and disability beneficiaries on February 3 were higher than the December checks by about 7 percent, with a minimum increase of \$3 for a retired worker.

All persons added to the old-age, survivors, and disability rolls in the future will also receive these higher benefit amounts, and the rolls are increasing by more than 100,000 per month. In February 1959, 60 percent of the total U.S. aged population were receiving monthly benefits and an additional 10 percent were eligible to receive them upon retirement.

Also as a result of the 1958 amendments to the Social Security Act, monthly benefits were payable beginning September 1958 to dependents of disability insurance beneficiaries. By February, 23,700 wives and 36,700 children of disability beneficiaries were receiving monthly benefits.

The number of old-age, survivors, and disability insurance beneficiaries at the end of this fiscal year is estimated at about 13,275,000 or 1,370,000 above the figure at the end of 1958. This means that every workday during the year there is a net addition of over 5,400 persons to the beneficiary rolls.

The OASI trust fund balance will decline somewhat in calendar 1959 but under the stimulus of larger contribution income, resulting under the 1958 amendments (from the higher tax rate in 1959 and the higher earnings base in 1959, augmented by the further tax rate increase in 1960), the trust fund will increase in 1960 and grow steadily for many years to come. The disability insurance trust fund has risen steadily since its inception in 1957, and is expected to continue this movement.

The Advisory Council on Social Security Financing which was established by the 1956 amendments recently submitted its report which concluded that, "The method of financing the old-age, survivors, and disability insurance program is sound, and, based on the best estimate available, the contribution schedule now in the law makes adequate provision for meeting short-range and long-range costs."

Public assistance

In looking at the public assistance programs, the effects of the economic dip in 1958 are noticeable. In February 1959, 5,775,000 persons in the United States and Territories were receiving assistance under the four federally aided programs, an increase of 310,000 persons or 5.7 percent above the year ago levels. This increase was brought about by a sharp rise in aid to dependent children rolls and a small increase in aid to the permanently and totally disabled rolls.

As a result of the extension of insurance coverage during the past few years, the number of aged persons receiving insurance benefits continues to increase rapidly while the number of aged persons receiving old-age assistance payments is continuing its slow decline. The total number of persons receiving old-age assistance in February 1959 was about 37,000 below the year ago level. A growing proportion of aged-assistance recipients are also receiving old-age, survivors, and disability insurance benefits. The latest study which we have made indicates that nearly one out of four of the old-age assistance recipients in February 1958 was also receiving old-age, survivors, and disability benefits, as compared with one out of five in February 1956. Such insurance payments reduce the amount of the payments that otherwise would have had to be made by the assistance programs.

Payments under the four federally aided programs have likewise increased during the year, primarily as the result of the increase in the number of assistance recipients and partly as the result of the 1958 amendments to the public assistance program which changed the Federal matching formula. In February 1958, payments under the four federally aided programs totaled \$246,200,000. By February 1959 the total had risen to \$267,600,000, an increase of \$21,400,000; of this increase, \$13,100,000 (62 percent) has occurred since September 1958, the month before the new public assistance matching provision became effective. The total increased Federal costs due to the 1958 amendments will be about \$125 million in the fiscal year 1959 and about \$161 million in 1960.

Maternal and child welfare programs

The children's programs of the Social Security Administration, administered by the Children's Bureau, include the three grants programs of maternal and child health, services for crippled children, and child welfare services, and activities of the Bureau in investigating and reporting upon matters affecting the well-being of children. Emphases in 1959 and 1960 will be upon certain specialized areas of need such as services for mentally retarded children, speech and hearing services, services for children with congenital heart disease, social services for children, and juvenile delinquency services. The publications program in relation to children's programs will be strengthened.

In the field of mental retardation \$1 million of maternal and child health funds have been earmarked since 1957 for special projects. In 1959 not only will all of this special fund be used but a substantial additional amount of Federal maternal and child health funds will be devoted to the problem of mental retardation. Since 1957, the year of inauguration of this special grants program, the number of States having approved programs for mental retardation has increased from 25 to 44. The total budget for these 44 States, including State and local funds also, is approximately \$2 million.

A supplemental appropriation of \$1,500,000 is requested for 1959 for grants for services for crippled children. These additional funds will be used exclusively for services for children with congenital heart disease. It is proposed that these funds remain available through June 30, 1960.

The sixth White House Conference on Children and Youth will be held in March 1960. The President's National Committee has been appointed, meetings are being held and a theme chosen. Active planning for holding the Conference is proceeding.

CONCLUSION

Since its inception in 1935, the social insurance program has been marked by a succession of progressive steps designed to increase coverage both in scope and in types of protection as well as to adjust benefit payments in relation to increases

in earnings and prices. The assistance program, during the same period of time, has been amended to assist the States in making more adequate payments to the needy and to provide services to assist recipients to achieving self-help and self-care. The program of maternal and child health and welfare has been greatly expanded in order to provide improved health and welfare services for mothers and children. In 1958, the far-reaching changes in the program placed great strain on our administrative machinery. We have had to focus on deadlines and the immediate job at hand. But while doing this we have tried not to neglect our responsibilities for constant improvement in the efficiency and economy of normal operations.

Toward this end, a committee of businessmen completed a study of the operations of the Bureau of Old-Age and Survivors Insurance which they described as "probably the largest paperwork operation in existence." We were extremely pleased that the committee concluded that the program was "carrying out its mission in a sound and vigorous manner."

Late in the calendar year 1958, Secretary Flemming issued invitations to several hundred national organizations to participate in a frank review of our social security programs and their administration. In two open forums, representatives of organizations related to our work gave free expression to their views.

In the Bureau of Old-Age and Survivors Insurance a broad study of the Bureau's claims processes was recently undertaken; in addition, I appointed a group to undertake a comprehensive, organized study of our appeals machinery looking toward improvements in organization, techniques, and procedures.

During the new fiscal year, we will have two new advisory groups looking into specific areas of our programs; namely, the Advisory Council on Public Assistance which will study the financing of our public assistance programs, and the Advisory Council on Child Welfare Services which will assist the Secretary in the evaluation of Child Welfare Services policies so that the recent extension of the program to urban areas will afford the most constructive total service for children.

As a concluding word, I would like to make a special plea for the funds which we have included for social security training and studies. We are convinced that our ability to assist in financing an increase in the number of trained public assistance personnel and in financing studies of the causes of many of our complex social problems and effective ways of dealing with them will greatly assist in directing social welfare activities in this country into the most constructive channels.

EFFECT OF HOUSE ACTION

With your permission, the effect of action taken by the House on our appropriation requests will be explained when witnesses for the items concerned appear before you.

BUREAU OF OLD-AGE AND SURVIVORS INSURANCE

LIMITATION ON SALARIES AND EXPENSES

STATEMENTS OF VICTOR CHRISTGAU, DIRECTOR, BUREAU OF OLD-AGE AND SURVIVORS INSURANCE; ROBERT M. BALL, DEPUTY DIRECTOR, BUREAU OF OLD-AGE AND SURVIVORS INSURANCE; WILLIAM L. MITCHELL, COMMISSIONER OF SOCIAL SECURITY; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For necessary expenses, including the purchase of two passenger motor vehicles, not more than **[\$133,300,000]** \$191,600,000 may be expended from the Federal old-age and survivors insurance trust fund: *Provided*, That such amounts as are required shall be available to pay the cost of necessary travel incident to medical examinations for verifying disabilities of individuals who file applications for disability determinations under title II of the Social Security Act, as amended. *Provided further*, That \$10,000,000 of the foregoing amount shall be apportioned for use pursuant to section 3679 of the Revised Statutes as amended (31 U.S.C. 665), only to the extent necessary to process claims workloads not anticipated in the budget estimates and after maximum absorption of the costs of such claims workload within the existing limitation has been achieved: *Provided further*, That this authorization shall

be available for research and development of electronic or automatic equipment, by contract, which shall be coordinated with similar activities and requirements of other Government agencies: *Provided further, That any such contract shall contain appropriate provisions to protect the interest of the Government and the public, including provisions relating to the disposition of rights in any inventions made or developed in the course of work under the contract:*

“[The amount authorized by the Departments of Labor, and Health, Education, and Welfare Appropriation Act, 1959, to be expended from the Federal old-age and survivors insurance trust fund for necessary expenses, is increased by \$5,831,000:] *Provided further, That persons who have been admitted to practice before a Federal or State court of record who have had a minimum of three years' experience in the adjudication or consideration of claims for retirement, survivors, or disability benefits may be temporarily appointed by the Commissioner of Social Security to hold hearings under title II of the Social Security Act, as amended, but such temporary appointments shall terminate not later than December 31, [1959] 1960: Provided further, That no person shall hold a hearing in any case with which he has been concerned previously in the administration of such title II.*

“Advances to States, next [succeeding] succeeding fiscal year: For making, after May 31 of the current fiscal year, advances to States under section 221(e) of the Social Security Act, as amended, for the first quarter of the next succeeding fiscal year, such sums as may be necessary from the above authorization may be expended from the Federal old-age and survivors insurance trust fund.”

Amounts available for obligation

	1959 appropriations	1960 budget to Congress	House allowance
Appropriation or estimate	\$133,300,000	\$181,600,000	\$181,600,000
Supplemental appropriation	5,831,000	-----	-----
Supplemental estimate	32,090,000	-----	-----
Contingency reserve	-----	10,000,000	10,000,000
Total appropriation or estimate	171,221,000	191,600,000	191,600,000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Positions	Amount	Positions	Amount	Positions	Amount
1. Maintenance of earnings accounts.....	4,140	\$23,796,857	4,479	\$26,637,932	4,479	\$26,637,932
2. Processing OASI claims.....	9,728	63,670,342	9,374	63,282,371	9,374	63,282,371
3. Maintenance of OASI beneficiary rolls.....	4,608	27,585,376	4,692	28,497,814	4,692	28,497,814
4. Processing disability claims and maintaining beneficiary rolls.....	3,465	33,513,048	3,960	38,834,739	3,960	38,834,739
5. Hearings and appeals.....	538	4,084,261	538	4,588,130	538	4,588,130
6. Actuarial services.....	15	118,600	15	122,156	15	122,156
7. Administration.....	2,610	18,452,516	2,521	19,636,958	2,521	19,636,858
8. Contingency reserve.....	-----	-----	-----	10,000,000	-----	10,000,000
1959 program obligated in 1958.....	-----	-607,311	-----	-----	-----	-----
Total obligations.....	25,104	170,613,689	25,579	191,600,000	25,579	191,600,000
1959 appropriation available in 1958.....	-----	+607,311	-----	-----	-----	-----
Limitation.....	25,104	171,221,000	25,579	191,600,000	25,579	191,600,000

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
Total number of permanent positions.....	25, 104	25, 579	25, 579
Full-time equivalent of all other positions.....	308	21	21
Average number of all positions.....	¹ 24, 115	¹ 25, 249	¹ 25, 249
Number of employees at end of year.....	25, 334	25, 221	25, 221
Average salaries and grades: General service grades:			
Average salary.....	\$4, 984	\$5, 099	\$5, 099
Average grade.....	5. 8	5. 8	5. 8
01 Personal services.....	\$127, 377, 830	\$131, 781, 515	\$131, 781, 515
02 Travel.....	3, 190, 303	2, 846, 035	2, 846, 035
03 Transportation of things.....	816, 747	791, 324	791, 324
04 Communication services.....	2, 441, 320	2, 600, 641	2, 600, 641
05 Rents and utility services.....	11, 344, 263	12, 497, 413	12, 497, 413
06 Printing and reproduction.....	1, 712, 842	1, 618, 189	1, 618, 189
07 Other contractual services.....	1, 078, 571	2, 458, 506	2, 458, 506
Advances to States.....	11, 575, 014	15, 555, 371	15, 555, 371
08 Supplies and materials.....	1, 575, 707	1, 506, 603	1, 506, 603
09 Equipment.....	2, 383, 634	1, 587, 763	1, 587, 763
11 Grants, subsidies, and contributions.....	7, 676, 926	8, 346, 989	8, 346, 989
13 Refunds, awards, and indemnities.....	2, 771	2, 771	2, 771
15 Taxes and assessments.....	45, 072	6, 880	6, 880
Contingency reserve (undistributed).....		10, 000, 000	10, 000, 000
1959 program obligated in 1958.....	-607, 311		
Total obligations.....	170, 613, 689	191, 600, 000	191, 600, 000

¹ Excludes overtime as follows: 1959—1,017 man-years; 1960—269 man-years.

Summary of changes

	Positions	Amount
1959 actual appropriation.....	22, 557	\$139, 131, 000
1959 supplemental appropriation.....	2, 547	32, 090, 000
Total appropriation.....	25, 104	171, 221, 000
Deduct:		
Nonrecurring equipment and printing costs.....		-1, 293, 173
Special projects to be conducted in fiscal year 1959.....	-241	-1, 234, 875
Overtime premium pay costs.....		-749, 762
Revised 1959 base.....	24, 863	167, 943, 190
1960 appropriation request.....	25, 579	191, 600, 000
Net change requested.....	+716	+23, 656, 810

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases:				
For contingency reserve.....		10,000,000		10,000,000
For mandatory items:				
Annualization of 338 new positions authorized in 1959.....		464,435		464,435
Within-grade promotions.....		2,014,939		2,014,939
All other average salary changes.....		884,876		884,876
Extra day of pay (261 days in 1959 and 262 days in 1960).....		478,530		478,530
Subtotal, mandatory items.....		3,842,780		3,842,780
For program items:				
Increases in volume of Bureau and State workloads.....	295	2,969,852	295	2,969,852
Purchase of medical examinations.....		1,919,741		1,919,741
Increase in unit costs of production.....	279	1,303,468	279	1,303,468
Special projects scheduled for fiscal year 1960.....	223	977,779	223	977,779
Movement to new headquarters (cost of GSA contract more than offsets decrease in positions).....	-157	68,804	-157	68,804
Space and communication changes.....		1,614,649		1,614,649
Nonrecurring purchases.....		740,479		740,479
Miscellaneous.....	76	219,258	76	219,258
Subtotal, program items.....	716	9,814,030	716	9,814,030
Total change requested.....	716	23,656,810	716	23,656,810

PREPARED STATEMENT

Senator HILL. We would be delighted to have you proceed in your own way.

Mr. CHRISTGAU. Thank you, Mr. Chairman. I have a brief summary statement to make and then if there are any questions to answer, we would be pleased to answer them.

Mr. Chairman and members of the committee, it is a pleasure to meet with you again. As you know, since we were here a year ago, Congress has enacted several significant changes in the Social Security Act. The 1958 amendments provide for an increase of about 7 per cent in the benefit amounts for all present and future beneficiaries beginning with the month of January 1959.

In addition, provision was made for the first time for the payment of benefits to dependents of disabled workers in like manner as in the case of dependents of retired workers. The 1958 amendments also revised requirements of eligibility to disability benefits, and to certain types of benefits payable to dependents of retired or deceased workers.

During the current year and in fiscal year 1960, the major emphases in administering the old-age and survivors insurance program will be twofold: (1) To process the peaked workloads growing out of the 1958 amendments to the Social Security Act; and (2) to continue to improve the way we are doing our job.

IMPACT OF 1958 AMENDMENTS

Except for the benefit increase, the provisions of the 1958 amendments became effective the month of September 1958. It was necessary therefore, for us to staff up and tool up promptly. Thus far we have increased our staff by about 2,700 employees. We also have been working large amounts of overtime.

The impact of the 1958 amendments will, of course, be greatest in fiscal year 1959. Nevertheless, a significant part of the one-time load—the backlog of those individuals made newly eligible for benefits—will be received in fiscal year 1960.

Although we are dealing with the immediate administrative problems which come with major changes in the law, we are also presently devoting much effort to improving our operations and will continue to do so in 1960.

We have made substantial progress in the time required to process initial claims. A year ago we were experiencing a sudden and large increase in claims as a result of the economic recession. We were also cleaning up a sizable carryover of the record workload we received in 1957, particularly in the disability area.

During the past year we have succeeded in cutting the average processing time for disability claims in half. We have also been able to reduce the average processing time for retirement and survivors' claims from 48 days in January 1958 to about 36 days.

AUTHORIZATION TO SPEND FROM TRUST FUNDS

For fiscal year 1960, the Bureau is requesting authority to spend \$181,600,000 from the trust funds, plus an authorization for a contingency fund of \$10 million to be used only in the event claims workloads are higher than projected in this request. The \$181,600,000 requested for 1960 represents an increase of \$10,379,000 over the anticipated appropriation for fiscal year 1959.

Senator HILL. Is that additional increase due to changes in the law?

Mr. CHRISTGAU. Yes, in part, and an accumulation of workload as each year goes on. We have a higher beneficiary load to take care of and then it is an annualization of our 1959 additions to personnel.

About 40 percent, or \$3.8 million of the increase, is in salary items which are required by statute, such as within-grade promotions, an extra day of pay, and a small amount for the reclassification of hearings referees.

1959 WORKLOADS

As the budget was computed, and as you have it, the total amount of work estimated to be processed in fiscal year 1960, including that to be done in State agencies, was expected to be about 1 percent higher than for fiscal year 1959. It now appears that 1959 workloads will be somewhat lower than shown in the budget so that the 1960 estimate will be more than a 1 percent increase over the 1959 realized load.

As in the case of workload, the money needed to process workloads in 1960 will also be somewhat higher now relative to 1959 than reflected in the budget. This is due to the fact that the amount available for 1959 workload handling was reduced by \$1,578,000 in the 1959 supplemental appropriation. The increase in cost for processing higher workloads in 1960 is now estimated to be close to \$3 million.

COSTS FOR DISABILITY CLAIMS

Another major item of increase is an additional \$1.9 million for purchase of medical examinations for adjudication of disability claims. This is due to higher workloads in State agencies and the increase in the proportion of reconsideration cases to total caseload. The remaining changes result in a net increase of \$1.6 million, thus accounting for a total increase of \$10.3 million in our 1960 appropriation request over the anticipated appropriation for 1959.

As a part of our efforts to find ways to prevent high pending loads and to maintain claims processing time at a desirable level, we are submitting as a part of this budget a request for a contingency fund of \$10 million.

Senator, this is the first time we have made that request and we think it will add a great deal to the manner in which we can staff up quickly when we meet unanticipated workloads.

Senator HILL. The budget and the House allowed you the \$10 million?

Mr. CHRISTGAU. Yes. Should Congress approve this, the prompt availability of these funds, when it becomes clear that workloads will exceed estimates, will put us in a position to move promptly and effectively to deal with such situations.

NEW BUILDING

I am happy to report that we hope by this time next year we will have moved into our new building.

Senator HILL. That has been in the process for a long time.

Mr. CHRISTGAU. Yes, sir. We hope you can be present at the opening.

Senator HILL. The committee has been very much interested in that building.

Mr. CHRISTGAU. Yes, sir. Our appropriation request for 1960 is based on the assumption that this move will take place by January 1, 1960. It will be necessary to continue some operations in downtown Baltimore throughout fiscal year 1960 and until the proposed addition to the building is completed.

We found after we planned the original building that we were short about 85,000 square feet of usable space, so the supplemental was requested.

The House has approved the \$181,600,000 requested for fiscal year 1960, plus the \$10 million contingency reserve. In addition, the House has approved all appropriation language changes except authority to engage in research and development on electronic devices.

We will be glad to try to answer any questions that committee members may wish to ask.

Senator HILL. Your statement will appear in full at this point in the record, Mr. Christgau.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, BUREAU OF OLD-AGE AND SURVIVORS INSURANCE ON
LIMITATION ON SALARIES AND EXPENSES, BUREAU OF OLD-AGE AND SURVIVORS
INSURANCE (TRUST FUND)

Mr. Chairman and members of the committee, it is a pleasure to meet with you again. Before presenting the details of the Bureau's appropriation request for fiscal year 1960, I would like to briefly review the program, and the changes in the program which have occurred since we met with you a year ago and our major objectives for the current year and fiscal year 1960.

OASI PROGRAM AND FINANCING

As you well know, the old-age, survivors, and disability insurance program provides insurance against three major economic risks: the loss of income due to retirement, death, and severe disability after age 50.

The statutory basis for the program is title II of the Social Security Act of 1935 revised by major amendments of 1939, 1950, 1952, 1954, 1956, and 1958. Under the program, people in covered employment and the self-employed make tax contributions during their working years to provide protection for themselves and their families. The contributions of employees are matched by their employers.

Both payments to beneficiaries and the salaries and other expenses of administering the program, are paid from the old-age and survivors insurance and disability insurance trust funds. Neither the administrative expenses, which are authorized for expenditure from the trust funds each year by the Congress, nor the benefit payments therefore are a charge against the general fund of the Treasury.

MAJOR AREAS OF EMPHASIS IN 1959 AND 1960

During the current year and in fiscal year 1960, the major emphasis in administering the old-age and survivors insurance program will be twofold: (1) To assimilate the changes brought about by the 1958 amendments to the Social Security Act, and (2) to continue to improve the way we are doing our job.

1. The 1958 amendments will have a sharp impact on Bureau operations in 1959 and to a lesser extent in 1960

The 1950's have been a decade of rapid and significant changes in the old-age, survivors, and disability insurance program. The Social Security Amendments of 1958 (Public Law 85-840) represent a continuation of the series of legislative changes broadening and improving the protection afforded by the program. The 1958 amendments provide for an increase of about 7 percent in the benefit amounts for all present and future beneficiaries beginning with the month of January 1959. In addition, provision was made for the first time for the payment of benefits to dependents of disabled workers in like manner as in the case of dependents of retired workers. The 1958 amendments also revised requirements for eligibility to disability benefits, and to certain types of benefits payable to dependents of retired or deceased workers.

Except for the benefit increase, the provisions of the 1958 amendments became effective the month of September 1958. It was necessary, therefore, for us to staff up and tool up promptly. Thus far, we have increased our staff by about 2,700 employees. We have also been working large amounts of overtime.

The impact of the 1958 amendments will, of course, be greatest in fiscal year 1959. Nonetheless, a significant part of the one-time load (the backlog of those individuals made newly eligible for benefits) will be received in fiscal year 1960.

2. Although we are dealing with the immediate administrative problems which come with major changes in the law, we are also presently devoting much effort to improving our operations, and will continue to do so in 1960.

(a) *Processing claims with all practicable speed.*—Since meeting with you a year ago, we have made substantial progress in the time required to process initial claims. At that time, the average retirement and survivors claim was taking 48 days to process; the average disability claim was taking about 200 days. We were then experiencing a sudden and large increase in claims as a result of the economic recession. We were also cleaning up a sizable carryover of work from 1957 particularly in the disability area. In the past year we have been able to cut the time for processing a disability claim almost in half—from an average of about 200 days in December 1957, to 119 days in February 1959. The processing time for claims for retirement and survivors benefits has been reduced from 48 days in January 1958 to about 36 days.

(b) *Exploring better ways for accomplishing our job.*—Several activities have been initiated to shorten processing time for the long run as well as to improve service in other ways. To cite a few:

We have established a new payment center in Baltimore to service all disability claims. This new center will consolidate in a single location the files on disability cases previously located in six payment centers and the Division of Disability Operations, thus permitting a more economical operation. By centralizing all disability operations, we will also reduce timelags due to mailing files from one work station to another.

A technological improvement we plan in January 1960 is the addition of a third battery of electronic equipment in our Earnings Records Center and the conversion of two batteries now in operation to an improved and speedier type. With the installation of the third battery of equipment, virtually all operations involved in maintaining up-to-date earnings records for each worker's account will be performed on electronic equipment with the exception of the initial operation of punching from the reports of earnings made by employers and the self-employed. The changes in use of electronic equipment scheduled for 1960 are expected to result in faster service to the public and a further decrease in the cost of processing earnings information.

Many years have passed—years of vast growth in the Bureau and its work—since we last made a thorough bureauwide study of the processes by which we carry on our major task, the payment of claims. Although we have constantly analyzed and studied our claims process, and in fact have underway dozens of projects and studies relating to parts of our claims operations, none of these activities can be said to cover the claims process as an entirety. We have now undertaken a broad study of the Bureau's claims processes, a study which will include all procedures and operations as they occur in the processing of claims. A major objective of the project will be the development of new and improved clerical and mechanical systems and methods for acquiring and processing the data needed to complete a claim. This study is being conducted by a select group of Bureau employees who have been relieved from their regular tasks for the duration of this study.

As a part of our efforts to find ways to prevent high pending loads and to maintain claims processing time at a desirable level, we are submitting as a part of this budget a request for a contingency fund of \$10 million. Should the Congress approve this, the prompt availability of these funds, when it becomes clear that workloads will exceed estimates, will put us in a position to move promptly and effectively to deal with such situations.

APPROPRIATION REQUEST FOR FISCAL YEAR 1960

For the fiscal year 1960, the Bureau is requesting authority to spend \$181,600,000 from the trust funds plus an authorization for a contingency fund of \$10 million to be used only in the event claims workloads are higher than projected in this request. The \$181,600,000 requested for 1960 represents an increase of \$10,379,000 over the anticipated total appropriation for fiscal year 1959, including supplementals. In terms of manpower, the appropriation request for 1960 projects an average staff on duty of 25,249 people. This is 85 employees less than the 25,334 we anticipate having on duty on June 30, 1959.

Compared with the anticipated fiscal year 1959 appropriation, the changes reflected in the 1960 request can be classified into four major categories:

(a) *Mandatory items, \$3,842,780*

About 40 percent of the increase of over \$10 million is related to salary cost items dictated by statutory requirements. Within-grade promotions, reclassifications of referees and members of the appeals council, and promotion of trainees will amount to almost \$3 million in 1960. An extra day of pay in 1960 accounts for an increase of close to a half million dollars. Also including in this category is the full year cost of staff added in 1959 and justified in the 1959 budget, in service, policy, and administrative activities. These activities are related to the long-term needs of the program as previously expanded and changed by legislative amendments. Needs for filling such staff positions lag somewhat behind the increases in measurable workloads. The positions, therefore, are budgeted for and justified separately. The annualization of these positions will cost \$464,435 in 1960.

(b) Increase in volume of work to be processed, \$2,969,852

As the budget was computed, and as you have it, the total amount of work estimated to be processed in fiscal year 1960, including that to be done in State agencies, was expected to be about 1 percent higher than for fiscal year 1959. It now appears that 1959 workloads will be somewhat lower than shown in the budget, so that the 1960 estimate will be more than a 1-percent increase over the 1959 realized loads. As in the case of workload, the money needed to process workloads in 1960 will also be somewhat higher now relative to 1959 than reflected in the budget. This is due to the fact that the amount available for 1959 workload handling was reduced by \$1,578,000 in the 1959 supplemental appropriation.

(c) Increase in requirements for medical examinations, \$1,919,741

Two factors contribute to the increased costs for medical examinations in fiscal year 1960: (1) The larger number of disability cases to be handled by State agencies in 1960 will require a corresponding increase in medical examinations to be procured (\$805,408), and (2) reconsideration and hearing cases and cases for investigation of continuing eligibility for benefits will make up a greater proportion of the total workload of State agencies in 1960. To process these types of cases, the Bureau has a greater need for purchasing medical examinations than in initial claims cases where the primary responsibility rests with the claimants. This latter factor accounts for an increase of \$1,114,333.

(d) All other changes, \$1,646,627

A combination of many changes make up this net increase. On the decrease side: (1) The one-time costs associated with recruiting and equipping as increased staff in 1959, and (2) the substantial amount spent in premium pay for overtime in 1959. Major items on the increase side for 1960: (1) The cost of carrying office space acquired in 1959 on an annual basis in 1960, (2) plans to move more of our district offices out of substandard space in 1960, and (3) some increases in costs for processing measurable workloads. Despite these increased costs, the output per man-year projected for 1960 is still substantially higher than that of fiscal year 1956, the most recent year that had a fairly normal balance between workload and staffing. If we had computed the 1960 budget on the basis of 1956 production rates, we would have required about 1,780 more employees than contained in this request.

APPROPRIATION LANGUAGE CHANGES

I would like to discuss some of the major changes in appropriation language which we are requesting this year.

Previously we touched on the reason why we are asking for a contingency fund. When we foresee higher workloads, we intend to move promptly to request release of funds from the contingency fund to deal with the higher than estimated workloads. The \$10 million contingency fund requested is not adequate to handle all contingencies but should be large enough to cover most workload increases except those resulting from major program changes.

The Bureau has made rapid strides since 1955 in the adaptation of electronic and other modern equipment to its operations. We are constantly in touch with and looking for new equipment which can be used advantageously. There are, however, several problem areas in Bureau operations which are peculiar to the Bureau and for which there are no suitable machines and no immediate prospects of their coming on the market. Further mechanization in these areas could produce not only substantial savings, but also better service to the public. As has been said before, virtually all operations related to posting earnings will soon be done on electronic equipment. However, the Bureau still has to punch 270 million earnings item cards manually each year. A number of the Bureau's huge national files have been converted to mechanical methods. Yet there remains the national numerical register and the file of applications for social security account numbers which are still manually maintained and used. There is a difficult problem in the Bureau's payment centers of speedily locating the claims folders to associate new evidence, correspondence, etc., for cases which are not in the files but in process for some action. At any one time in any one payment center it is not uncommon to have as many as 75,000 or more claims folders being worked on in process of the operation. If high-speed communications systems could be used for tying in the district offices, where claims applications are received, to the records center and the payment centers, substantial improvements in service could be achieved.

For some of these jobs no suitable equipment to improve the methods used is yet available but there are prospects for development of it given the necessary

push. A major problem in the development of machines which can read alphabetical and numerical characters and directly reduce them to tape or tabulating cards is the practical necessity to have them read a variety of different type fonts. However, 16 percent of the wage items reported to the Bureau come in on tabulating equipment listings using uniform characters. This 16 percent of items requires punching over 40 million cards. Substantial economy would be achieved in the Bureau by eliminating manual punching for this sizable proportion of the total items reported and a major breakthrough in character-reading devices might result if machines were built for reading only such characters.

For some of the jobs, combinations of different types of equipment might prove useful but would need special devices to join them or make them compatible. By some combination of the techniques of using magnetic tape, microfilm, and tabulating cards, coupled with devices to make a special and compatible use of them, improvements might be found in the present methods of handling the Bureau's national files.

The problems of control of claims folders in process and of communications between offices might be met by existing equipment but it appears that their adaptability to the Bureau's unique needs would require or be enhanced by the development of auxiliary devices to use with them.

These problems and their possible solutions are cited merely as examples of areas where we feel that research would be fruitful. This is why we are continuing to seek authority to finance such research.

Contained in our appropriation language is a request for extending the deadline date for employment of temporary referees of the Appeals Council from December 31, 1959, to December 31, 1960. The need for this appropriation language change will be discussed by the Social Security Commissioner.

MOVE TO THE NEW BUILDING

I am happy to report that we hope by this time next year we will have moved into our new building. Our appropriation request for 1960 is based on the assumption that this move will take place by January 1, 1960. It will be necessary to continue some operations in downtown Baltimore throughout fiscal year 1960 and until the proposed addition to the building is completed.

RESEARCH ON ELECTRONIC EQUIPMENT

Senator HILL. That authority to engage in research and development of electronic devices, will you explain exactly what you mean?

Mr. CHRISTGAU. I would be glad to have Mr. Ball go into that.

Mr. BALL. Mr. Chairman, this is an item that we have requested several times, as you may remember.

Senator HILL. I recall this.

Mr. BALL. The authority that we are seeking is to use part of the funds that are appropriated from the trust fund to contract out for research in the area of new technology related to the wage record and other parts of our big paperwork job. It has been our thought that some of the applications in the new electronics field are such that they are pertinent largely to our own operation and that companies engaged in the manufacturing of this equipment are frequently not too anxious to engage in research and development work on a limited application basis that only we would use.

Senator HILL. In other words, you would be the only customer.

Mr. BALL. Or perhaps the only customer that would need all of the applications that we would be speaking of or we might need them right now and they could not be sure that they could get other customers. It is true we have been quite successful in moving along on the coattails, as it were, of private business and other Government agencies in the development work that has gone on here. We feel we would have made even faster progress if we had this authority.

Senator HILL. If you had the results and devices that you estimate would come from this research, would that cut down your cost of operation much, or just expedite your actions on applications and payments and things of that sort?

Mr. BALL. I think, Mr. Chairman, that it would have made it possible for us to have these technological advances sooner. I am not saying that they would not come along anyway. By having them sooner I think it would both decrease the cost and make the service to the public faster.

Senator HILL. How much did you want?

AUTHORIZATION NEEDED

Mr. BALL. There was no request for funds in connection with this.

Senator HILL. You need authority to use these trust funds?

Mr. BALL. Yes.

Senator HILL. If you had the authority, how much do you estimate you would expend this coming fiscal year of 1960?

Mr. BALL. I believe our plan was to limit this to about \$150,000.

Senator HILL. Did the Department and the Bureau of the Budget recommend this authority for you?

Mr. KELLY. Yes, they did, Mr. Chairman. I might just make a statement on that. We have submitted it to you several times before and the Congress has denied it. I think normally we might not have come back with this request if it had not been for the fact that recently a group of outside independent consultants made an evaluation for the Secretary. I might add that they found it to be a very effective and efficient organization although they did identify areas where study and improvements might be brought about. One of the things they did recommend was that this language be sought and it was this additional support that occasioned us to bring it to you again with the request that you consider the item.

Senator HILL. Could you provide for the record the names of those consultants?

Mr. CHRISTGAU. Yes, we would be glad to.

Senator HILL. Was this a unanimous report?

Mr. CHRISTGAU. Yes.

(The information referred to follows:)

MEMBERSHIP OF THE CONSULTANT GROUP

Reinhard A. Hohaus, vice president and chief actuary, Metropolitan Life Insurance Co., chairman

Arthur K. Jacobs, manager, Sears Roebuck & Co.

John L. Ogle, auditing department, General Electric Co.

Robert Ramspeck, vice president, Eastern Air Lines

Joseph M. Savage, executive director of planning and research, Prudential Insurance Co. of America

Walter A. Stevens, systems planning engineer, American Telephone & Telegraph Co.

Lucius L. van Oosten, assistant vice president, Allstate Insurance Co.

ESTIMATES OF FUNDS NEEDED

Senator HILL. Was there a limitation on the amount?

Mr. KELLY. I don't think there was an expressed language limit, but it was the intent that there would not be more than \$150,000 of the appropriation used.

Senator HILL. This money would come out of your trust funds?

Mr. CHRISTGAU. Yes.

Senator HILL. Which come in through the taxes on the employer and employee?

Mr. CHRISTGAU. Yes, sir; and the self-employed, too.

Senator HILL. With the exception of this one question which we raised about this research, is the amount which the budget allowed you and as approved by the House just what you feel you will need for your operations this year?

Mr. CHRISTGAU. On the basis of our present estimate that would be about right.

Senator HILL. So far as you can see now, you don't need any changes?

Mr. CHRISTGAU. No. We thing the provision for the contingency fund meets any unanticipated workloads that we might run into.

Senator HILL. That would give you that much surplus or cushion?

Mr. CHRISTGAU. That is right. As you know, these workloads are uncontrollable. While we estimate them frequently quite close sometimes we get additional loads that are completely unanticipated. This would permit us to move quickly into that area.

Senator HILL. Are there any questions?

COMMENDATION FOR AGENCY

Senator BYRD. Mr. Chairman, I want to express my appreciation and I think in doing so I am expressing the appreciation of other members of the committee and the members of the House and Senate to Mr. Christgau for the excellent attention that he gives to our numerous referrals to his agency. In my 6 years of experience in the House of Representatives and continuing here in the Senate, I have found that the replies which I receive from your office, Mr. Christgau, are, I think, the most comprehensive, the most courteous, the most responsive answers to referrals that I receive from any agency in the Government. You are always prompt in following through with your initial letter. You acknowledge the receipt of the correspondence immediately. You are complete and thorough in following through and giving us the final report on a case. I have commented on this many times. I think I wrote to the Secretary of Health, Education, and Welfare 2 or 3 years ago and complimented you to him. You are doing a remarkable job and I am sure that your previous experience in the House of Representatives may have something to do with it.

Senator HILL. As a former Member of the House might I thoroughly agree with you, sir.

Senator BYRD. You are thoroughly cognizant of the demands that are made upon us and the many, many letters that we receive which have reference to social security claims. I feel that as a result of your past experience in this field you know what it means to us as representatives of the people to get quick and thorough replies to our referrals. So I just want the record to show, Mr. Chairman, that Mr. Christgau's fine attention to the work that is placed upon him by the Members of Congress, who in turn are trying to do the work of their constituents, is recognized and very much appreciated.

Mr. CHRISTGAU. Thank you.

Senator BYRD. I want to compliment you, too, Mr. Christgau on your presentation to the committee today. I am very pleased to note

that you are cutting down the processing time for disability claims and other claims. I trust you will continue to put forth a great deal of effort to further reduce the processing time.

Senator HILL. Senator Byrd, I would certainly like to join you in expressing appreciation to Mr. Christgau for the very satisfying manner in which he operates his office and the splendid service which he renders to Members of Congress and to the people back home.

Mr. CHRISTGAU. Thank you very much, Mr. Chairman. I want to say I inherited a very excellent staff and much of the work that the Senator has commented on has resulted from the very able staff we have in Baltimore and also in Washington.

Senator HILL. Are there any questions?

Senator BIBLE. I have no questions, Senator, except that I concur with the sentiments expressed. In my short time in Washington I find no bureau that gives us the prompt and excellent service your bureau does. I think you and your staff are highly deserving of a round of applause on it. It is outstanding work.

Mr. CHRISTGAU. Thank you very much.

Senator HILL. You agree with the two former Members of the House?

Senator BIBLE. This is a unanimous opinion.

Senator HILL. Senator Bible and Senator Byrd very much appreciate that. Thank you very much, Doctor.

Mr. CHRISTGAU. Thank you, sir.

GRANTS TO STATES FOR PUBLIC ASSISTANCE

STATEMENTS OF JAY L. RONEY, DIRECTOR, BUREAU OF PUBLIC ASSISTANCE, ACCOMPANIED BY ANDREW R. N. TRUELSON, EXECUTIVE OFFICER, BUREAU OF PUBLIC ASSISTANCE; MRS. DOROTHY B. WEST, CHIEF, OPERATING STATISTICS BRANCH, DIVISION OF PROGRAM STATISTICS AND ANALYSIS, BUREAU OF PUBLIC ASSISTANCE; WILLIAM L. MITCHELL, COMMISSIONER OF SOCIAL SECURITY; ROY L. WYNKOOP, ADMINISTRATIVE OFFICER, SOCIAL SECURITY ADMINISTRATION; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For grants to States for old-age assistance, aid to dependent children, aid to the blind, and aid to the permanently and totally disabled, as authorized in titles I, IV, X, and XIV of the Social Security Act, as amended (42 U.S.C., ch. 7, subchs. I, IV, X, and XIV), **[\$1,806,400,000]** \$2,033,500,000, of which such amount as may be necessary shall be available for grants for any period in the prior fiscal year subsequent to March 31 of that year."

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Regular appropriation.....	\$1, 806, 400, 000	\$2, 033, 500, 000	\$2, 033, 500, 000
Supplemental appropriation.....	151, 560, 000		
Available from subsequent year appropriation.....	490, 000, 000	490, 000, 000	490, 000, 000
Available in prior year.....	- 423, 493, 296	- 490, 000, 000	- 490, 000, 000
Total obligations.....	2, 024, 466, 704	2, 033, 500, 000	2, 033, 500, 000
Financing:			
Available from subsequent year appropriation.....	- 490, 000, 000	- 490, 000, 000	- 490, 000, 000
Available in prior year.....	423, 493, 296	490, 000, 000	490, 000, 000
Appropriation.....	1, 957, 960, 000	2, 033, 500, 000	2, 033, 500, 000

Obligations by activities

Description	1959 estimate	1960 estimate	House allowance
1. Payments to recipients:			
(a) Old-age assistance.....	\$1, 088, 873, 700	\$1, 108, 500, 000	\$1, 108, 500, 000
(b) Aid to dependent children.....	579, 803, 200	599, 500, 000	599, 500, 000
(c) Aid to the blind.....	44, 557, 400	47, 300, 000	47, 300, 000
(d) Aid to the permanently and totally disabled.....	137, 225, 700	160, 700, 000	160, 700, 000
Total.....	1, 850, 460, 000	1, 916, 000, 000	1, 916, 000, 000
2. State and local administration:			
(a) Old-age assistance.....	56, 500, 000	58, 900, 000	58, 900, 000
(b) Aid to dependent children.....	50, 300, 000	55, 300, 000	55, 300, 000
(c) Aid to the blind.....	3, 800, 000	3, 600, 000	3, 600, 000
(d) Aid to the permanently and totally disabled.....	14, 900, 000	17, 200, 000	17, 200, 000
Total.....	125, 000, 000	135, 000, 000	135, 000, 000
Total for all programs.....	1, 975, 460, 000	2, 051, 000, 000	2, 051, 000, 000
Collections and adjustments during year.....	- 17, 500, 000	- 17, 500, 000	- 17, 500, 000
Total obligations against appropriation.....	1, 957, 960, 000	2, 033, 500, 000	2, 033, 500, 000
Amount obligated in prior year for grants chargeable to appro- priation for current year.....	- 423, 493, 296	- 490, 000, 000	- 490, 000, 000
Amount obligated in current year for grants chargeable to appropriation for subsequent year.....	490, 000, 000	490, 000, 000	490, 000, 000
Total obligations.....	2, 024, 466, 704	2, 033, 500, 000	2, 033, 500, 000
Financing:			
Appropriation available from subsequent year.....	- 490, 000, 000	- 490, 000, 000	- 490, 000, 000
Appropriation available in prior year.....	423, 493, 296	490, 000, 000	490, 000, 000
New obligation authority (Appropriation).....	1, 957, 960, 000	2, 033, 500, 000	2, 033, 500, 000

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
Grants, subsidies, and contributions.....	\$2, 024, 466, 704	\$2, 033, 500, 000	\$2, 033, 500, 000

Summary of changes		Amount
1959 actual appropriation.....		\$1, 806, 400, 000
1959 supplemental appropriation.....		151, 560, 000
Total appropriation.....		1, 957, 960, 000
1960 appropriation request.....		2, 033, 500, 000
Net change requested.....		75, 540, 000

	1960 budget estimate	1960 House allowance
Increases:		
Payments to recipients:		
Old-age assistance.....	\$19, 626, 300	\$19, 626, 300
Aid to dependent children.....	19, 696, 800	19, 696, 800
Aid to the blind.....	2, 742, 600	2, 742, 600
Aid to the permanently and totally disabled.....	23, 474, 300	23, 474, 300
Total increase for payments to recipients.....	65, 540, 000	65, 540, 000
State and local administration:		
Old-age assistance.....	2, 400, 000	2, 400, 000
Aid to dependent children.....	5, 000, 000	5, 000, 000
Aid to the blind.....	300, 000	300, 000
Aid to the permanently and totally disabled.....	2, 300, 000	2, 300, 000
Total increase for State and local administration.....	10, 000, 000	10, 000, 000
Net change in appropriation requirements.....	75, 540, 000	75, 540, 000

*Public assistance: Estimated obligations for grants to States for fiscal year 1960*¹

States and territories	Old-age assist- ance	Aid to de- pendent children	Aid to the blind	Aid to the permanently and totally disabled	Total
Total.....	\$1, 154, 786, 300	\$651, 626, 800	\$50, 682, 600	\$176, 404, 300	\$2, 033, 500, 000
Alabama.....	41, 787, 300	8, 181, 500	659, 000	5, 413, 800	56, 041, 600
Alaska.....	805, 700	1, 070, 900	54, 800	-----	1, 931, 400
Arizona.....	7, 400, 400	6, 951, 100	448, 300	-----	14, 799, 800
Arkansas.....	26, 770, 400	5, 485, 700	1, 119, 600	3, 009, 800	36, 385, 500
California.....	138, 271, 900	68, 282, 000	7, 519, 700	2, 735, 600	216, 809, 200
Colorado.....	27, 278, 000	7, 342, 700	178, 400	3, 341, 200	38, 140, 300
Connecticut.....	7, 648, 100	6, 324, 700	163, 500	1, 255, 600	15, 391, 900
Delaware.....	659, 100	1, 510, 800	165, 300	198, 600	2, 533, 800
District of Columbia.....	1, 683, 300	3, 888, 600	157, 300	1, 492, 700	7, 221, 900
Florida.....	35, 824, 700	17, 415, 200	1, 392, 000	4, 363, 600	58, 995, 500
Georgia.....	43, 754, 900	16, 111, 000	1, 832, 400	10, 639, 500	72, 337, 800
Guam.....	105, 200	228, 600	5, 200	61, 000	400, 000
Hawaii.....	716, 100	3, 040, 500	44, 500	676, 900	4, 478, 000
Idaho.....	4, 215, 900	1, 946, 700	103, 300	627, 400	6, 893, 300
Illinois.....	40, 450, 100	35, 893, 000	1, 708, 600	11, 822, 900	89, 874, 600
Indiana.....	14, 528, 200	11, 241, 300	1, 022, 900	-----	26, 792, 400
Iowa.....	19, 875, 700	8, 611, 500	859, 100	-----	29, 346, 300
Kansas.....	17, 039, 600	5, 657, 500	364, 100	2, 989, 200	26, 100, 400
Kentucky.....	21, 752, 000	16, 510, 400	1, 431, 000	3, 915, 100	43, 608, 500
Louisiana.....	69, 144, 700	23, 979, 400	1, 566, 200	9, 449, 600	104, 139, 900
Maine.....	6, 675, 900	5, 651, 200	268, 500	1, 113, 700	13, 709, 300
Maryland.....	4, 655, 800	8, 619, 500	236, 500	3, 068, 300	16, 580, 100
Massachusetts.....	42, 750, 500	13, 106, 900	1, 130, 700	5, 855, 600	62, 843, 700
Michigan.....	33, 347, 100	25, 146, 200	954, 300	2, 332, 000	61, 779, 600
Minnesota.....	25, 481, 600	8, 739, 800	640, 800	1, 307, 600	36, 169, 800
Mississippi.....	24, 210, 200	8, 010, 000	2, 273, 300	2, 637, 200	37, 130, 700
Missouri.....	57, 326, 800	23, 015, 000	2, 694, 100	9, 123, 200	92, 159, 100
Montana.....	3, 998, 600	2, 097, 400	220, 300	900, 600	7, 216, 900
Nebraska.....	8, 920, 300	3, 127, 600	579, 500	977, 200	13, 604, 600
Nevada.....	1, 342, 600	916, 700	92, 200	-----	2, 351, 500
New Hampshire.....	2, 807, 000	1 182, 200	137, 500	217, 200	4, 343, 900
New Jersey.....	9, 713, 200	8, 638, 0 0	497, 400	3, 280, 300	22, 128, 900
New Mexico.....	5, 673, 600	7, 454, 000	230, 400	1, 369, 200	14, 727, 200
New York.....	43, 995, 700	71, 278, 700	2, 304, 800	23, 167, 500	140, 746, 700
North Carolina.....	18 576, 400	19, 020, 400	2, 446 200	8, 160, 500	48, 203, 500
North Dakota.....	4, 290, 100	2, 050, 100	68, 900	708, 600	7, 117, 700
Ohio.....	43, 956, 500	21, 425, 000	1, 994, 900	5, 673, 600	73, 050, 000
Oklahoma.....	51, 613, 800	16, 774 400	1, 098, 700	5, 652, 200	75, 139, 100
Oregon.....	9, 216, 300	5, 236, 100	168 500	2, 856, 100	17, 477, 000
Pennsylvania.....	21, 395, 900	43, 103, 200	3, 949, 000	9, 138, 300	77, 586, 400
Puerto Rico.....	2, 235, 500	4, 858, 100	109, 600	1, 296, 800	8, 500, 000
Rhode Island.....	3, 707, 100	4, 386, 900	78, 800	1, 306, 900	9, 479, 700
South Carolina.....	13, 207, 700	6, 063, 100	777, 600	3, 219, 500	23, 267, 900
South Dakota.....	5, 038, 000	3, 128, 800	102, 000	669, 900	8, 938, 700
Tennessee.....	23, 595, 600	15, 887, 700	1, 450, 300	3, 029, 600	43, 963, 200
Texas.....	97, 445, 600	20, 205, 000	3, 064, 300	4, 039, 900	124, 754, 800
Utah.....	4, 730, 100	3, 388, 600	131, 500	1, 274, 300	9, 524, 500
Vermont.....	3, 131, 900	953, 700	76, 900	439, 900	4, 602, 400
Virgin Islands.....	108, 000	70, 400	6, 500	19, 400	204, 300
Virginia.....	5, 967, 300	7, 593, 600	613, 600	3, 126, 900	17, 301, 400
Washington.....	27, 904, 800	11, 826, 700	414, 800	3, 753, 600	43, 899, 900
West Virginia.....	7, 165, 200	20, 052, 800	462, 100	3, 574, 100	31, 254, 200
Wisconsin.....	18, 993, 400	8, 228, 500	577, 500	804, 200	28, 603, 600
Wyoming.....	1, 846, 900	717, 400	35, 400	317, 900	2, 917, 600

¹ Based on estimated distribution for fiscal year 1959.

CATEGORICAL ASSISTANCE

Senator HILL. Mr. Jay L. Roney, Director, Bureau of Public Assistance. We are very glad to have you with us.

Mr. RONEY. Thank you, sir.

Senator HILL. We would be happy to have you proceed in your own way.

Mr. ROONEY. I have a short statement and will file one for the record.

Senator HILL. Will you please proceed.

Mr. RONEY. Under the four public assistance titles of the Social Security Act, the Federal Government shares with the States the responsibility for providing for the welfare of some 5.7 million needy people. These people suffer the dual handicaps of financial need combined with old age, disability, or family disruption. The purpose of the public assistance programs is to provide needy persons with income to supplement their own resources so that they may secure the necessities of life and to help them achieve as much economic and personal independence as possible. People are considered needy if all the income they have or can obtain from other sources is less than the cost of the minimum living standard set by their State. The assistance payment is intended to make up the difference.

1960 APPROPRIATION REQUEST

The appropriation request for 1960 is \$2,033,500,000. This amount is \$75,540,000 more than the appropriation for 1959 including the anticipated supplemental of \$151,560,000 for that year. Most of the increase is attributable to higher average payments per recipient resulting from the 1958 amendments to the public assistance titles of the Social Security Act which will be in effect for all of 1960 in contrast to only the last three quarters of 1959. The balance of the increase is due to an estimated increase in numbers of recipients under all programs except old-age assistance and to an increase in the costs of State and local administration in line with increases in costs of administering other State and local functions. These increases will be offset in part by the effect of the 1958 amendments to the old-age, survivors, and disability insurance provisions of the Social Security Act in reducing the costs of public assistance below what they otherwise would have been.

AMENDMENTS, 1956 AND 1958

I should like to point out that the 1956 and 1958 amendments to the public assistance titles of the Social Security Act have greatly strengthened and improved the legislative base underlying the Federal role in helping the States to provide financial and other welfare services to the lowest income groups in this country. The 1958 amendments improved the basis for Federal participation in financial assistance to needy people and the 1956 amendments reaffirmed the importance of other welfare services directed toward helping needy people to develop to the maximum their capacity for personal and economic independence.

Together, these amendments by the groundwork for a renewed attack on the problems that confront needy people. As I am sure you will recognize, this is a task that will not be finished up in short order,

but one that will require unremitting effort over a long period of time on the part of State and local governments as well as the Federal Government. Even with more Federal financial participation, assistance payments in many States are inadequate. Unfortunately, payments are lowest in those States where the percentage of Federal participation is highest. Prospects for improvement in these States therefore will depend on the ability and willingness of the States to increase their share of assistance. With respect to other welfare services, we must face the fact that in most States staff is not available either in the required numbers or with the qualifications requisite to do the job that ought to be done—and can be done eventually when these barriers have been removed. The Bureau staff seeks to help States make the best use of both their financial and human resources and to maintain a balance in emphasis between financial assistance and other welfare services. We believe this coordinated approach, as recognized in the 1956 Amendments to the Social Security Act, is essential to dealing with basic problems of people on public assistance and in helping many of them to realize fuller use of their own capacities.

PUBLIC ASSISTANCE PROGRAM

Senator HILL. I was in the House in 1935 when we passed the Social Security Act and the thought then was that the public assistance program would be only what we might call a period program that would come to an end because we would gradually get more and more people under the old-age survivors insurance. But instead of that happening, the old-age assistance program has continued to grow year after year, has it not?

Mr. RONEY. It is continuing to gradually decline now.

Senator HILL. Has it finally reached the point now where there is some decline?

Mr. RONEY. Yes. Not sensational, but a gradual decline. In terms of the increased number of the aged people in the country, however, it has substantially declined.

Senator HILL. Of course, the population has been increasing.

Mr. RONEY. That is right.

Senator HILL. Due to the great advance in medical care, people live quite a bit longer than they did in the year 1935—nearly a quarter of a century ago—when we passed that act.

Mr. RONEY. Yes, sir.

DECLINE IN OLD-AGE ASSISTANCE

Senator HILL. Considering all the factors of the situation the figures do show a decline.

Mr. RONEY. In old-age assistance.

Senator HILL. That is what I mean.

Mr. TRUELSON. Mr. Chairman, for 1960, the average number of recipients per month is estimated at 2,390,000 as compared with an average of 2,442,000 for 1959, which is a decrease of about 52,000. So that indicates the decline.

Mrs. WEST. I think even more significant than that is the decline in the rate in relation to the population 65 or over. In 1950, we had a rate of 226 per thousand population aged 65 and over, and that rate in December 1958 was 159 per thousand. That is a very sharp drop.

Senator HILL. That is a very definite drop.

Mrs. WEST. Yes.

Senator HILL. Do you have the figures prior to 1950 with you?

Mrs. WEST. Yes, I have. The rate started out at 81 per thousand in 1936. Of course, that was before the State programs had little more than started.

Senator HILL. That is because the States had not come into the program.

Mrs. WEST. Then the rate was 217 per 1,000 in 1949. It went down a little bit during the war. By 1945 it was down to 194. Then it went up again to 226 and has now dropped to 159.

Senator HILL. That is a pretty definite drop, is it not?

Mr. RONEY. Yes.

DIFFERENCE IN EXPENDITURES, 1959 AND 1960

Senator HILL. In your statement did you set out the difference in the expenditures for next fiscal year over this fiscal year?

Mr. RONEY. Yes. Primarily the increase is due to the fact that the amendments covered only three quarters in this fiscal year.

Senator HILL. In other words, last year we only provided funds for 9 months whereas this year we will have to provide funds for the full 12 months, under the amendments to the act that were passed.

Mr. RONEY. That is right. Then there is encompassed in the estimate an amount that takes care of the increased number of recipients, which is accounted for by the increased number of children in the population. The proportion of assistance recipients in aid to dependent children, the rate per thousand, is staying fairly constant; but with a rising child population we have an actual increase in number.

Senator HILL. Your overall number would be larger.

Mr. RONEY. Yes, sir.

Senator HILL. Are there any questions?

If not, thank you very much, gentlemen. Your full statement will appear in the record.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, BUREAU OF PUBLIC ASSISTANCE, SOCIAL SECURITY ADMINISTRATION ON GRANTS TO STATES FOR PUBLIC ASSISTANCE, BUREAU OF PUBLIC ASSISTANCE

Under the four public assistance titles of the Social Security Act, the Federal Government shares with the States the responsibility for providing for the welfare of some 5.7 million needy people. These people suffer the dual handicaps of financial need combined with old age, disability, or family disruption. The purpose of the State public assistance programs is to provide needy persons with income to supplement their own resources so that they may secure the necessities of life and to help them achieve as much economic and personal independence as possible. People are considered needy if all the income they have or can obtain from other sources is less than the cost of the minimum living standard set by their State. The assistance payment is intended to make up the difference.

Grants to the States for assistance and administration are based on plans submitted by the States for each program and approved by the Social Security Administration as meeting the requirements of the Social Security Act. This provision of the act for a State plan recognizes the desirability of reserving to each State the necessary latitude in determining the scope and methods of operation of its program within the general conditions set forth in the Federal law. At the same time, it provides a systematic basis for a State to submit

to the Federal Government a document which specifies the nature of its programs and the types of expenditures in which the Federal Government is asked to participate.

PROGRAM COVERAGE

Today, all the States, the District of Columbia, Hawaii, Puerto Rico, and the Virgin Islands, have approved plans for old-age assistance, aid to dependent children and aid to the blind; 48 jurisdictions now have approved plans for the program of aid to the permanently and totally disabled established by the Social Security Act Amendments of 1950. It is not anticipated that this relatively new program will be in operation in 1960 in 5 jurisdictions—Alaska, Arizona, Indiana, Iowa, and Nevada. The Social Security Amendments of 1958 extended the provisions of the Social Security Act to Guam and it is estimated that all four of the assistance programs will be in operation in Guam in 1960.

SOCIAL SECURITY AMENDMENTS OF 1958

The 1958 amendments to the public assistance titles increased the Federal share of assistance payments and also made major changes in the formula for determining the Federal share of assistance payments. These changes are described below.

1. *Variable Federal grants*

Effective October 1, 1958, Federal grants to the States for public assistance vary, in part, according to each State's fiscal ability. In general, States with per capita income below the national average have a relatively larger proportion of needy people than the States with above-average per capita income and relatively less fiscal ability. Because larger Federal grants will be made available to the States with lower income, these States should be able to make more nearly adequate payments. If they do so, greater equity among State payments will be achieved. The Federal grants vary for that part of each State's payments which is between the first \$30 and the new maximum of \$65 per recipient of old-age assistance, aid to the blind, and aid to the permanently and totally disabled. For aid to dependent children, the variable-grant formula applies to that portion of State payments that range between the first \$17 and the new maximum of \$30 per recipient.

The amount of the grants varies from 50 percent, for States with above average per capita income, to 65 percent, for States whose per capita income is below the national average. The per capita income of each State is determined by use of Department of Commerce statistics for 3 previous years. Prior to the effective date of the legislation, the Federal Government shared 50-50 in the upper portion of each State's assistance payments. Federal participation in the lower portion of the States' payments remains at its former ratio to State expenditures. That is, Federal funds are available to cover four-fifths of the State payments up to \$30 per recipient of old-age assistance, aid to the blind, and aid to the permanently and totally disabled; and to cover fourteen-seventenths of the payments up to \$17 per recipient of aid to dependent children.

2. *Averaging*

To give the States greater flexibility in meeting the needs of individual recipients, Federal grants are now computed on a new averaging principle. Thus, the States will presumably be able to meet above-average needs, because higher payments can be counterbalanced by lower payments to people with less need. It is believed that the averaging principle will also simplify the States' fiscal procedures.

Federal grants for each program are now based on each State's average payment per recipient including both money payments and payments to suppliers of medical care multiplied by the total number of recipients enrolled in the program. Anyone who receives money payments or medical or remedial care is considered a recipient.

Formerly, Federal grants were related to each individual money payment, and to each State's average expenditures per recipient for vendor medical care payments.

3. *Medical care*

State expenditures for medical care are now included with money payments, for purposes of Federal sharing. Federal contributions are the same whether medical-care payments are made to the recipient or to those who provide him with medical services.

This method is expected to result in simplified accounting procedures in the States. It also eliminates limitations placed on the provision of medical care under the former legislation, which provided for Federal matching of medical costs up to an average expenditure of \$6 per adult and \$3 per child on the State's public assistance rolls.

4. Other provisions

The 1958 amendments extend, for the first time, Federal participation in public assistance programs to Guam, on a basis similar to Puerto Rico and the Virgin Islands, up to a total annual Federal expenditure of \$400,000. The amendments also raised limitations on the total annual Federal payment for Puerto Rico and the Virgin Islands to \$8,500,000 and \$300,000, respectively. As in other jurisdictions, the Federal share is now determined on the basis of the average expenditure per recipient but is limited to 50 percent of lower average maximums (\$35 per recipient for the adult categories and \$18 per recipient for aid to dependent children).

ESTIMATED COSTS, FISCAL YEAR 1960

For 1960, total Federal, State, and local expenditures for assistance and administration are estimated at \$3.5 billion. The Federal share of these expenditures is estimated at \$2,051 million of which \$17.5 million will be met from the Federal share of collections and adjustments for prior years made by the States during the fiscal year 1960. Thus the appropriation request is \$2,033,500,000. This amount is \$75,540,000 more than the appropriation for 1959 including the anticipated supplemental, \$151,560,000, for that year. Most of the increase is attributable to higher average payments per recipient resulting from the 1958 amendments to the public assistance titles of the Social Security Act, which will be in effect for all of 1960 in contrast to only the last 3 quarters of 1959. The balance of the increase is due to an estimated increase in the numbers of recipients under all programs except old-age assistance, and to an increase in the costs of State and local administration in line with increases in the cost of administering other State and local functions. These increases will be offset in part by the effect of the 1958 amendments to the old-age, survivors, and disability insurance provisions of the Social Security Act in reducing the costs of public assistance below what they otherwise would have been.

BASIS FOR ESTIMATES

Number of recipients

For all programs except old-age assistance, the trend in number of recipients has been upward since 1953. A major factor underlying this trend is the increase in total population. The number receiving old-age assistance has declined, despite the population increase, because of the continuing growth in the number who receive old-age and survivors insurance benefits. The 1958 amendments providing benefit payments for dependent parents of a deceased worker even though a widow, dependent widower, or child survive the worker will contribute to a further decline.

In aid to dependent children, the upward trend results from an increase in the number of children in the population and in the total number of families, coupled with an even larger proportionate rise in the number of families broken by divorce, separation, or desertion or headed by an unmarried mother. In recent years, these broken families have had a much smaller rise in income than normal families, with the result that more of them need assistance. The economic downturn during the fiscal year 1958 resulted in a larger than normal increase in the number aided during that year. The relatively small increase in the number of recipients of aid to dependent children projected from 1959 to 1960 is based upon the assumption that the more favorable employment situation which existed prior to the economic downturn occurring in the fiscal year 1958 will be restored. It has been assumed that the recipient rate, that is, the number of children per 1,000 under 18 years to be aided, will remain the same; however, the total number to receive assistance will increase slightly because of the continued growth in the child population.

Part of the growth in the program of aid to the permanently and totally disabled (authorized by the 1950 amendments) is due to the approval of new State plans, including most recently those for the large States of California and Texas, and the more rapid growth of programs in the early years of operation.

The improvement in State assistance standards made possible by additional Federal funds provided under the Social Security Amendments of 1956 and 1958 also results in some additions to the assistance rolls from among those who would not have qualified under lower standards.

Average monthly payments

The additional Federal funds provided under the Social Security Amendments of 1956 brought about a rise in assistance payments, and it is believed that the 1958 amendments will have a similar effect. The continuing increase in cost of living will probably result in further payment increases in States that are able to finance higher payments. The rising costs of medical care are a major factor in payment increases in the adult categories.

The justification statement shows the detail on the estimated changes in number of recipients and average monthly payment under each program from 1959 to 1960.

State and local administration

The total amount to be expended for State and local administration of the four assistance programs is estimated at \$270.7 million of which the Federal Government will contribute about one-half. The Federal share is estimated at \$135 million for 1960, \$10 million more than in the preceding year. The Federal share of \$125 million estimated for 1959 is \$8.7 million more than the amount actually expended in the fiscal year 1958. About 86 percent of the administrative expense is for salaries of staff of State and local public assistance agencies and other personal services, such as fees for medical examinations to determine initial and continuing eligibility for assistance.

Increases anticipated in 1959 over 1958 are attributable to salary increases which will be given to all State and local employees including those who administer public assistance. These increases, which account for almost two-fifths of the total increase, are primarily to compensate for rises in the cost of living although some are due to within-grade promotions under established compensation plans. Another two-fifths of the increase is due to the employment of additional personnel to give effect to the Social Security Amendments of 1956, which stress the importance of welfare services directed toward self-support, self-care, and strengthening of family life. Part of the need for additional staff stems from the changing character of the caseload, which includes a growing proportion of cases with serious social and health problems. Costs of items other than salaries, such as rentals, equipment, and supplies, also are continuing to rise; a little more than a fifth of the total increase is attributed to larger expenditures for these nonsalary items. It is believed that these same factors will underlie the increase projected from 1959 to 1960.

SALARIES AND EXPENSES, BUREAU OF PUBLIC ASSISTANCE

APPROPRIATION ESTIMATE

“For expenses necessary for the Bureau of Public Assistance, **[\$1,980,000]** \$2,345,000.”

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Regular appropriation.....	\$1, 980, 000	\$2, 345, 000	\$2, 345, 000
Supplemental appropriation (for pay increase).....	186, 500		
Total appropriation.....	2, 166, 500	2, 345, 000	2, 345, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Program policies and standards.....	56	\$492,090	66	\$597,568	66	\$597,568
2. Review State plans and grants, evaluate State operations.....	158	1,250,435	161	1,282,261	161	1,282,261
3. Collect and interpret statistics.....	31	230,445	33	248,406	33	248,406
4. Administration.....	28	193,530	28	216,765	28	216,765
5. 1959 program obligated in 1958.....		-2,200				
Total obligations.....	273	2,164,300	288	2,345,000	288	2,345,000
Financing: 1959 appropriation available in 1958.....		2,200				
New obligational authority.....	273	2,166,500	288	2,345,000	288	2,345,000

Obligations by objects

Object classification	1959 appro- priation		1960 budget estimate	1960 House allowance	
Total number of permanent positions.....	273		288	288	
Full-time equivalent of all other positions.....	3		4	4	
Average number of all employees.....	260		272	272	
Number of employees at end of year.....	263		278	278	
Average GS grade and salary.....	8.7	\$7,025	9.0	\$7,225	9.0 \$7,225
01 Personal services:					
Permanent positions.....	\$1,801,200		\$1,926,300	\$1,926,300	
Positions other than permanent.....	12,000		24,600	24,600	
Other personal services.....	31,300		39,100	39,100	
Total personal services.....	1,844,500		1,990,000	1,990,000	
02 Travel.....	109,000		118,300	118,300	
03 Transportation of things.....	2,500		2,500	2,500	
04 Communication services.....	27,620		28,320	28,320	
05 Rents and utility services.....			300	300	
06 Printing and reproduction:					
Printing.....	9,000		11,700	11,700	
Reproduction.....	17,000		20,950	20,950	
07 Other contractual services.....	9,900		17,000	17,000	
Services performed by other agencies.....	12,980		13,200	13,200	
08 Supplies and materials.....	12,400		13,230	13,230	
09 Equipment.....	3,200		2,600	2,600	
11 Grants, subsidies, and contributions: Contributions to retirement fund.....	117,000		125,180	125,180	
13 Refunds, awards, and indemnities.....	800		800	800	
15 Taxes and assessments.....	600		920	920	
1959 program obligated in 1958.....	-2,200				
Total.....	2,164,300		2,345,000	2,345,000	

Summary of changes

	Positions	Amount
1959 actual appropriation.....	273	\$1,980,000
1959 supplemental appropriation (for pay increase).....		186,500
Total appropriation.....	273	2,166,500
Deduct nonrecurring costs.....		—5,600
Revised base.....	273	2,160,900
1960 appropriation request.....	288	2,345,000
Total change requested.....	+15	+184,100

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases:				
For mandatory items:				
Extra days' pay (261 days in 1959 and 262 days in 1960).....		\$7,000		\$7,000
Annualization costs for 10 additional positions in 1959.....		16,000		16,000
Subtotal.....		23,000		23,000
For program items:				
Program policies and standards: Increase of 5 positions in the area of medical care; and 5 positions (and also an amount of \$10,000 in other contractual services) for the Bureau to conduct direct training activities for those State public assistance employees whose responsibilities most greatly affect the quality and quantity of services provided public assistance recipients to help them toward independent living.....	10	89,343	10	89,343
Review State plans and grants, evaluate State operations: These positions are primarily for additional work involved in the review and action on State plan material and on individual State problems.....	3	13,906	3	13,906
Collect and interpret statistics: Additional staff is required for special studies relating to broad Bureau emphasis in the area of medical care....	2	10,801	2	10,801
Administration: Expenses of the new Advisory Council on Public Assistance and the report of the Council, as required by the Social Security Amendments of 1958 (Public Law 85-840).....		22,050		22,050
Other: Reclassification of an estimated 35 Bureau positions: The civil service classification standards, which are used for most of the Bureau's professional positions, social administration series 102-0, have recently been revised. It is contemplated that the review of current responsibilities in relation to the revised classification standards will result in these reclassifications.....		25,000		25,000
Total change requested.....	15	184,100	15	184,100

New positions requested, fiscal year 1960

	Grade	Annual salary
Activity 1. Program policies and standards:		
Division of Program Standards and Development:		
Medical consultant	GS-15.....	\$12,770
Medical assistance specialist	GS-13.....	9,890
Do	GS-12.....	8,330
Clerk-stenographer	GS-5.....	4,040
Division of Technical Training:		
Staff development specialist	GS-13.....	9,890
Do	GS-12.....	8,330
Division of State Administrative and Fiscal Standards:		
(2) Welfare methods specialist, administrative	GS-12.....	16,660
Welfare methods specialist, fiscal	GS-12.....	8,330
Clerk-stenographer	GS-4.....	3,755
Total new positions, activity 1		(10) 81,995
Activity 2. Review State plans and grants, evaluate State operations:		
Division of Program Operations:		
Central office:		
Public assistance technician	GS-12.....	8,330
Clerk-stenographer	GS-4.....	3,755
Regional: Clerk-stenographer	GS-4.....	3,755
Total new positions, activity 2		(3) 15,840
Activity 3. Collect and interpret statistics:		
Division of Program Statistics and Analysis:		
Research analyst	GS-12.....	8,330
Statistical clerk	GS-4.....	3,755
Total new positions, activity 3		(2) 12,085
Total new positions, all activities		(15) 109,920

GENERAL STATEMENT

Mr. RONEY. Under the four public assistance titles of the Social Security Act, the Federal and State Governments share the responsibility to provide financial assistance and services for over 5 million people. The States receiving Federal grants operate their programs according to State laws and regulations, as well as Federal law.

Financial aid was the primary need of millions of people, when the Social Security Act was passed in 1935. In recent years, however, changes in our society have increased people's need for money and intensified the personal and family problems that may cause or prolong, as well as accompany, financial need. In 1956, personal as well as financial welfare was strongly emphasized in amendments to the public assistance titles of the act. These amendments stressed the development and expansion of social services, including medical care, to help public assistance recipients develop the highest degree of self-care, self-support, and strong family life appropriate to their individual capacities. Although considerable progress has been made, fulfillment of the goals established by the 1956 amendments is a continuing and long-range task of both the Bureau of Public Assistance and State agencies.

The social security amendments of 1958 made significant changes by increasing the amount of Federal funds available to all States for public assistance, and by making possible greater flexibility to the States in claiming Federal funds for payments to meet needs of people.

The 1958 amendments also made provision for an Advisory Council on Public Assistance. Eleven of the 12 members were recently ap-

pointed by Secretary Flemming. The group includes employers, community leaders, experts in the administrative and financial aspects of State and Federal programs. The Commissioner of Social Security serves as council chairman. The Council will report its findings and recommendations to the Congress by January 1, 1960.

APPROPRIATION REQUEST, 1960

For 1960, we are requesting an appropriation of \$2,345,000 and 288 positions, an increase of \$178,500, and 15 positions over estimated requirements for 1959. Of this increase, about \$22,000 will be required for additional costs due to the statutory Advisory Council. The balance of the request is primarily in the area of medical care which is essential to providing self-care and self-support and is recognized as of major importance both by the Department and the States. With present staff, the Bureau is unable to provide technical assistance—recognized as needed and requested by States. My detailed opening statement and the justification on salaries and expenses provide a report to the committee on major progress and problems in these areas as well as on implementation of the 1956 and 1958 amendments. If the chairman and members of the committee have any questions regarding program developments and proposed work planning, I shall do my best to answer them. I believe that the increase of \$178,500 for 1960 represents a sound investment and would enable us to undertake a minimum of constructive work toward improving Federal-State programs involving over \$2 billion in Federal funds and over 5 million needy persons.

IMPROVING WORK WITH STATES

Senator HILL. That \$2 billion in Federal funds is a lot of money, and that does not count the money that goes in from the States.

Mr. RONEY. That is right.

Senator HILL. And it affects 5 million people.

Mr. RONEY. Yes, sir.

Senator HILL. Do you think if you had more funds you could do much toward helping this situation looking toward a reduction of these funds?

Mr. RONEY. In terms of the requests that have come to us, particularly in this medical care area to which we are addressing at least a portion of this increase, it would seem that if we can give good consultation and advice to the States as they set up these medical care programs, it is going to mean money saved both in the State funds and the Federal, as you look ahead to the future. If, for example, we can share the experiences that one State has had that started a program with a State that is just starting one, they can eliminate some of the errors the others have made, and so forth.

Senator HILL. Does this budget provide you the funds to do that?

Mr. RONEY. It will have a substantial effect in our ability, Senator, to provide that kind of service.

TRAINING AND RESEARCH FUNDS

Mr. MITCHELL. May I point out that later on we have a budget estimate for training and research. If we could get an appropriation for that, we would have high hopes as to the accomplishments which

we might make in reducing the cost of this public assistance program, both through increasing the number of trained staff to deal with these problems as well as in finding some of the basic causes of dependency, so we can deal with them more intelligently.

Senator HILL. How much money would that take?

Mr. MITCHELL. We have an estimate of \$1,785,000. A million dollars for training, \$700,000 for research and \$85,000 for administration. I was prepared to testify to that item as it came up in the regular course, but it does fit in with your questioning very well right here.

Senator HILL. You go ahead, then, and then give us any further information you can.

Mr. MITCHELL. Yes, sir. The authorization for training and studies was given to us in 1956. Each year we have undertaken to arrange for an appropriation, but one place or another it has fallen by the wayside. This has been a very great disappointment to us, because we feel so much could be accomplished. It seems strange that so much money is available for scientific research in other areas but as I understand it, in the Federal Government only 2 percent of the research money goes into the social science field. That does not seem to reflect any relationship whatever to the extent or the difficulty of the problems in the social sciences. As a matter of fact, our social system becomes more complex as we make advances in the biological and the physical sciences. This is a very modest beginning that we are proposing. It would have the effect of enabling us to start off in the research field with possibly as many as 30 projects designed to show us much more about the causes of dependency and how to deal with them.

NEED FOR PROFESSIONAL PERSONNEL

Then once we get that information plus what we know already we would need a substantially greater core of trained professional people in order to apply this knowledge. As it stands at the present time, as I recall it, only 1 out of 5 of the 37,000 people who are employed in the administration of public assistance in the States have any professional social work training. It has been demonstrated many times over in the States where they have developed experimental or demonstration projects that one or two professional people working on a small group can make tremendous inroads on the existing load and also in keeping people off the public assistance rolls. In other words, even before they become beneficiaries trained people can find ways and means whereby applicants can be taken care of. That is a thumbnail sketch of the whole program, but it really tells the story. I can't dwell or speak too sincerely on the belief that we feel that this small amount of money would help us tremendously in getting at some of these facts and dealing with the situation more intelligently.

Senator HILL. I think any private business that had an outgo of \$3 billion affecting 5 million people would be very much interested in trying to cut down the cost of operation and if possible to cut these funds down. Is this \$1,785,000 the amount that the Department requested of the Budget?

Mr. MITCHELL. No, sir. We requested an authorization that was substantially larger than that, \$2,535,000 for training and \$1,060,000 for research, but in relation to the total demands on the Budget this year, the estimate would appear to be a very fine start and would enable us to get this program well under way.

HOUSE ACTION

Senator HILL. In other words, you would feel gratified if you got the \$1,785,000.

Mr. MITCHELL. Yes, sir, we would.

Senator HILL. And the budget put it in for you.

Mr. MITCHELL. Yes, sir.

Senator HILL. And the House approved it?

Mr. MITCHELL. The House took it out.

Senator HILL. What did the House say about it? It says the committee has not allowed the request for \$1,785,000 for this new program. But your feeling is that amount of money appropriated and expended this next fiscal year could well bring large dividends so far as reducing the cost of this program is concerned, both to the Federal Government and to the States.

Mr. MITCHELL. Yes, sir.

Mr. RONEY. There is actually no doubt about that, Senator.

TRAINING GRANT MONEY FOR STATES

Going back to the original question about the effects of our few additional Bureau staff, this training grant money really would be money to the States, so that they could improve their staff qualifications and would have much greater possibilities of impact over a period of years. It won't happen over night. It would happen over a few years.

Mr. MITCHELL. Mr. Chairman, I would not attempt to interpret for the committee what the committee is perfectly able to interpret for itself, but I happen to know that some of the members of the House committee feel quite differently in this respect. Those who apparently are concerned about its approval are concerned on the ground that this might more appropriately be a program that should be financed by the States. That is one area of concern. This was brought out by the testimony that I gave before the House committee. The other was that this training authorization provides for 80-20 matching—80 percent Federal and 20 percent on the part of the States.

Senator HILL. That is the basic act?

Mr. MITCHELL. Yes. The objection was expressed to that as being a proportion that did not seem to have any particular meaning. On that I am not able either to give a very lucid explanation of why the figure is 80-20 in relation to 50-50 or 100 percent Federal matching. That is what the act provides for, and if that should be changed, it would be a matter of substantive change in legislation. But the authorization we now have is this way. I can testify to the fact that this money is very badly needed and would serve a very useful purpose.

Senator HILL. Are there any questions?

ADMINISTRATIVE PERSONNEL IN STATES

Senator BIBLE. Mr. Chairman, I would like to ask just one question just for information. I do not know whether this figure is readily available, though I assume it could be obtained. That is, how many administrative people are involved in public assistance programs on the Federal, State, and local level?

Mr. TRUELSON. If I could speak to that, Senator, on the Federal level we have a staff of 273.

Senator BIBLE. Yes, I notice that.

Mr. TRUELSON. In the States and local welfare departments there is approximately a total of 70,000. There are about three-fourths of those who have an equivalent amount of time devoted to public assistance. So I would say there are about 52,000 or so that are engaged in full-time public assistance activities. That is professional and clerical.

Senator BIBLE. I meant the total people that would be chargeable to the program which is in the neighborhood of 50,000 to 70,000.

Mr. TRUELSON. Yes. The 70,000 are engaged in all kinds of welfare activities such as general assistance financed entirely by State and local funds with no Federal participation. There are other employees engaged in child welfare activities and other activities that are not public assistance.

TOTAL COST OF STATE PERSONNEL

Senator BIBLE. Do you know what the total cost of employing these 50,000 people is?

Mr. TRUELSON. For public assistance?

Senator BIBLE. I am limiting it to public assistance.

Mr. TRUELSON. About \$250 million at the present time.

Senator BIBLE. It costs \$250 million just to pay the people who administer the public assistance?

Mr. TRUELSON. That is also for other objects of expense.

Senator BIBLE. I mean rent and travel.

Mr. TRUELSON. Everything; yes. That includes \$125 million in Federal funds at the present time.

Mr. MITCHELL. They are involved in the expenditure of over \$3 billion of public assistance benefits.

Senator BIBLE. The total overall Federal, State, and local cost is in the neighborhood of a quarter of a million dollars?

Mr. MITCHELL. A quarter of a billion, or \$250 million. The figure for 1960 is \$270 million.

Senator HILL. And they expend how much money now?

Mrs. WEST. About three billion.

Senator BIBLE. Thank you very much.

Senator HILL. I am glad you brought those figures out, Senator. Senator Byrd, do you have any questions?

FUNDS FOR ADDITIONAL POSITIONS

Senator BYRD. I wonder how much of the \$178,000 is to be utilized for the additional 15 positions?

Mr. TRUELSON. Roughly, about \$100,000. The balance is for increased cost of operations that relate to the Advisory Council on Public Assistance established by Congress through the 1958 amendments and for other items of increase.

Mr. WYNKOOP. Your question was how much of \$178,000 was for personnel?

Senator BYRD. How much would be utilized for the additional 15 positions?

Mr. RONEY. That is what he replied—about \$100,000.

DISTRIBUTION OF SURPLUS COMMODITIES

Senator BYRD. Mr. Roney, I would like also to ask what the effect is of the welfare distribution program under which surplus commodities are being distributed to needy families. How much effect that has on the cost for your agency; or is that effect measurable?

Mr. RONEY. According to the way the surplus commodity program is administered, it is not supposed to affect the welfare program. What I mean is that the States are not supposed to reduce their welfare payments for those who get surplus commodities. That may seem offhand like a contradiction to the requirement in the act for consideration of all resources. The reason is that surplus commodities are so sporadic and changeable that you never can rely on them for sure. In those States where you have relatively low assistance payments, we must recognize that surplus commodities become quite an important matter in the diets of many persons.

Senator BYRD. I may not have made my question clear. I am interested in knowing what the effect is on the administrative cost of the program.

Mr. WYNKOOP. The value of these surplus commodities that were distributed during the fiscal year 1958 is \$75 million. But they do not all go to the recipients of public assistance.

Mr. RONEY. Your question was addressed to the administrative cost of the program.

Senator BYRD. Yes. There must be some additional administrative cost involved.

Mr. RONEY. In public assistance—I believe the usual procedure is that if a person is eligible for public assistance it automatically makes him eligible for surplus commodities. So that you can say from that standpoint, it doesn't affect the administration of the public assistance aspects as such. Does that seem to make sense?

QUESTION OF CERTIFYING RECIPIENTS

Senator BYRD. It seems to me that the process of certifying recipients and applying the formula would certainly be time consuming and, as a result, would be a factor in your administrative costs.

Mr. RONEY. You mean the formula for public assistance?

Senator BYRD. Whatever the formula is. I mean for qualifying for surplus commodities. I understand that a family of a certain size would qualify for surplus commodities if that family did not have an income over a certain amount. So it seems to me that there must be some time and effort and work involved for your people.

Mr. RONEY. That would be another group. The first group I was trying to describe is those who have already been determined to be eligible for public assistance as such. Then the usual procedure is that they are automatically eligible for surplus commodities. For this group there really is no additional administrative cost. The surplus commodities are available to other people in addition to those who are eligible for public assistance. To the extent that welfare offices are asked to do this kind of certification of eligibility there is an administrative cost involved. That administrative cost is borne by the State along with administrative costs for programs for which we do not reimburse the States. The State has a number of administrative

expenditures, like general assistance, in which we do not participate. This aspect of surplus commodities would come into that area of the cost of administration.

Senator BYRD. Thank you.

Senator HILL. Your full statement will be included in the record. (The statement referred to follows:)

STATEMENT OF DIRECTOR, BUREAU OF PUBLIC ASSISTANCE ON SALARIES AND EXPENSES, BUREAU OF PUBLIC ASSISTANCE

INTRODUCTION

Under the four public assistance titles of the Social Security Act, the Federal and State Governments share the responsibility to provide financial assistance and services for over 5 million people. The States receiving Federal grants operate their programs according to State laws and regulations, as well as Federal law. The Federal grants are administered by the Bureau of Public Assistance, the Department unit charged with helping the States provide aid to the Nation's neediest people—the aged, the dependent children, the blind, and the permanently and totally disabled. These public assistance programs involve about \$3½ billion in Federal, State, and local funds, including over \$2 billion in Federal funds.

Financial aid was the primary need of millions of people, when the Social Security Act was passed in 1935. In recent years, changes in our society have both increased people's need for money and intensified the personal and family problems that may cause or prolong, as well as accompany, financial need. In 1956, personal as well as financial welfare was strongly emphasized in amendments to the public assistance titles. The 1956 amendments stressed the development and expansion of social services, including medical care, to help public assistance recipients develop the highest degree of self-care, self-support, and strong family life appropriate to their individual capacities. It is the continuing and long-range task of the State public assistance agencies and the Bureau of Public Assistance to work toward fulfillment of these goals. Significant changes were also made by the 1958 amendments. The effect of these changes is to (1) increase the amount of Federal funds available to all States for public assistance, (2) make possible greater flexibility in meeting individual needs of people, and (3) simplify State fiscal procedures for claiming Federal funds. The additional Federal funds are expected to enable States, especially those with limited fiscal resources, to make more adequate assistance payments, and to help achieve greater equity in the level of assistance available to needy persons in different parts of the country. However, responsibility for determining how the additional Federal money is to be used in the best interests of assistance recipients is a matter for individual State determination.

STRENGTHENED SOCIAL SERVICES FOR NEEDY PEOPLE

The nature and extent of social services provided by public welfare agencies have varied greatly between States, within a State, within a locality, and even between workers in the same agency depending on their awareness, skill, and the acceptance of such practice as an essential part of the effective administration of public assistance. Efforts during the past year, therefore, were increasingly directed toward helping the States to strengthen the service aspects of their programs.

The submittal by States of plans describing services available under their programs, and the steps taken to assure maximum utilization of similar or related services furnished by other agencies, led to more critical evaluation by the States of the services they were already providing, and served as a basis for planning for their extension and increasing effectiveness on a statewide basis.

A review of these State services plans reveals some progress in defining more clearly the services offered by the State, as well as effective use of these resources. For example, some State plans provide special help to the handicapped, homemaker service for the ill and aged, and/or foster care for the ill or aged unable to live alone but not in need of custodial care. Although there is great variation in the range of problems on which States offer services, certain common areas are recognized by most States—the effects of financial need, illness, family relationships, and lack of education and training for employment.

These State plans have also indicated areas needing further emphasis on a nationwide basis, such as the importance of the role that the public assistance agency can play in community planning for the development and utilization of new and needed resources.

The Bureau is participating with the Family Service Association of America in planning for a 1959 Conference on Family Life to be held in Washington. Similarly, plans are being made for the second National Conference on Homemaker Service to be held in Chicago in February 1959 under the joint sponsorship of various constituent units within the Department and 26 national voluntary social and health agencies. Preconference activities included Bureau participation in planning a Public Health Service survey of existing homemaker services, and the development and issuance of a descriptive Directory of Agencies Providing Homemaker and Related Services in the United States, under the joint auspices of the Bureau of Public Assistance, Children's Bureau, and the Public Health Service. Public welfare personnel from State and local agencies are also serving on most of the study groups organized in various parts of the country to develop basic work materials for the conference.

This concentrated attention on the potentials of the use of homemaker service will undoubtedly contribute further to the progress beginning to be made in the use of this service to release family members caring for assistance recipients to seek gainful employment; to permit the chronically ill, the emotionally handicapped, the physically disabled, the aged to remain in their own homes as long as possible; and to maintain a home for dependent children when the mother is ill or otherwise temporarily unable to care for them.

Work is continuing in strengthening cooperative relationships between State public assistance and vocational rehabilitation agencies, as well as between public and voluntary agencies providing services needed by families receiving aid to dependent children and other disabled needy individuals. The Bureau is represented on an intradepartmental committee to consider the problems of working mothers in relation to programs within the Social Security Administration. In addition, liaison is continued with the Child Welfare League of America in developing standards on protective services for children.

The Bureau's major services for the aged are in relation to income-maintenance with recognition given to such factors as cost of special needs and standards for determining eligibility. Also, interest in the aging is reflected in many other Bureau activities including: participation with American Public Welfare Association committees in developing statements on social service needs of older people and on the community planning responsibilities of public welfare; and participation in activities of the National Social Welfare Assembly Committee on Aging in emphasizing social services for older people and the enrichment of training of social workers to work with the aging.

IMPLEMENTATION OF THE 1958 AMENDMENTS

Amendments to the Social Security Act in August 1958 revised the basis of Federal financial participation in State expenditures for public assistance in three significant ways:

(1) For the first time, the fiscal ability of each State is considered, in part, in determining the Federal share of a State's expenditures for public assistance.

(2) The Federal share is related to a single average expenditure per recipient for both assistance and medical care.

(3) The maximum amount of expenditures for assistance, including medical care, in which the Federal Government will participate is limited to an amount equal to \$65 a month times the number of aged, blind, and disabled recipients in the State; and \$30 times the number of recipients of aid to dependent children.

Immediately after the social security amendments were enacted, the Bureau of Public Assistance issued materials to help the States put the changes into effect for the benefit of over 5 million needy aged, blind, disabled, or dependent children now receiving aid. A conference was also held to discuss the implications of the amendments with State welfare administrators.

The Bureau has computed, as required by the new formula, the percent of Federal sharing in each State's payments. This computation is based on State per capita incomes in 1955, 1956, and 1957. Bureau specialists have concen-

trated on clarifying policy, definitions, and interpretations. Statistical reporting systems have been revised. Revised procedures and instructions have been developed for making estimates and reports of expenditures. Bureau consultants have given on-the-spot help to States on specific problems.

The Bureau plans to analyze the effects of the new formula on State operations as soon as special reports showing what has happened and what is expected to happen are received from all the States. In the meantime, we are accumulating information as it becomes available from various sources, such as State plans, reports from regional staff, etc. Based on this preliminary information, all but 14 States have taken steps or are now in process of taking action to use the additional Federal funds through one or more methods to increase payment levels to the public assistance recipients. The most common method was a change in the cost standard which occurred in 32 jurisdictions. In most instances the increase in cost standard applied to all categories and food was the most common item for which increases were allowed. Increasing the amount of maximum payments or removing maximum payments occurred in 13 jurisdictions—in some instances this change was made for all categories and in other States it was made in some of the categories.

The time between the passage of the 1958 amendments and their effective date of October 1 was too short for most States to put into effect changes in standards and payments before November or December. In some States it will take considerably longer before the changes are fully effective. Through joint Federal-State efforts, the Bureau will place emphasis in 1960 on working cooperatively with the States so the Social Security Act Amendments of 1958 will strengthen the public assistance programs and thus serve needy people more effectively. Special attention will be directed to working with State agencies to find ways of making more equitable and adequate programs of assistance and services appropriate for the aged, the blind, the disabled, and for needy children and their parents.

PROVISION OF MEDICAL CARE FOR PUBLIC ASSISTANCE RECIPIENTS

A large proportion of the public assistance caseload is made up of persons with unusually heavy medical needs resulting from disability, chronic illness, or infirmities of old age. With the tremendous development of medical science, access to medical services has become an increasingly important aspect of individual and family welfare. Medical care should be available through public assistance to everyone who is unable to purchase his own care and for whom other provisions are not available in the community. This overall goal was recognized by Congress in making provision for medical care in the 1950 amendments and the subsequent changes in the 1956 and 1958 amendments.

As of January 1958, 51 jurisdictions were providing some medical care under one or more of their programs for public assistance recipients. However, the amount and scope of medical care varied considerably and covered the following types of care: Practitioners' services, hospitalization, drugs, nursing-convalescent home care, dental services, nursing services, clinic services, prosthetic appliances, ambulance (or other transportation), laboratory and X-ray services. The type of care covered most frequently under plan provisions for the three adult programs—old-age assistance, aid to the blind, and aid to the permanently and totally disabled—was nursing-convalescent home care. Among the other types of care, those covered most frequently under the adult programs were drugs, hospitalization, and practitioners' services. For the adult programs, the types of care covered by the smallest numbers of States were nursing services, except for such services provided in hospitals and nursing or convalescent homes, and clinic services. For aid to dependent children, the pattern of items of care covered was essentially the same as for the adult programs.

Since the enactment of the 1950 amendments, which made available Federal matching for vendor payments for medical care, the growth of such payments has been rapid. In the fiscal year 1952, the first full year of operation under those amendments, vendor payments for medical care under the four public assistance programs amounted to about \$70 million. During the fiscal year ended June 30, 1958, such payments totaled approximately \$236 million.

The most comprehensive information relating to amounts for medical care included in requirements on which money payments are based is from a special study, on a voluntary basis, for a selected month in early calendar year 1957. For the 25 States reporting information of this type for one or more of the programs, the proportion of cases having an amount for medical care included in

requirements for money payments varied widely, both among programs and among States. The total increase in money payments for the country as a whole that resulted from the inclusion of medical needs in requirements amounted to about \$100 million a year.

The single averaging formula in the 1958 amendments provides for more flexibility to the State in claiming Federal funds for payments to meet needs of people. It also permits simplification of State fiscal procedures for claiming Federal funds. State administrative planning for the provision of medical care in public assistance can now be focused on the basis of what is the best way to meet the recipient's medical needs rather than on problems arising in determining method of payment. This emphasis on the provision of medical care in public assistance will increase the need for Bureau consultation with States in the administration and program development of the medical care items in their standards of assistance.

One of the most expensive types of medical care for assistance recipients is nursing-convalescent home care. This type of care is particularly important for the permanently and totally disabled and is becoming increasingly more important for the aged as the average age of recipients increases.

The National Conference on Nursing Homes and Homes for the Aged, at which Bureau staff participated in 1958, made several recommendations to improve services provided to individuals requiring nursing home care. We are now participating with Public Health Service in a series of regional meetings to discuss ways of obtaining the best use of health and welfare personnel in achieving this common objective. Institutional care is not only costly, but quite scarce. States request assistance in determining the type of care needed; in assuring that costs are reasonable in relation to services rendered; and in developing other services in connection with apparent need for institutional care.

The quality of medical care, as well as its cost, provided to public assistance recipients will depend largely upon the type, timeliness, and amount of leadership provided by Bureau staff. Bureau work varies considerably from State to State and is of a continuing evolutionary and developmental nature. Even though good economy demands that medical care be provided on the most efficient basis possible—both in the initial phase and on a continuing basis—technical consultation currently requested or identified as needed in some 31 State agencies will have to be curtailed because of insufficient staffing.

The only place where data and information on a national basis are available on the subject of public assistance medical care is through the machinery of the State-Federal public assistance programs. Therefore, the Bureau has an obligation with respect to gathering information for use of all States and other groups developing recommended standards to help States in their operations and in solving current problems.

REQUEST FOR 1960

The Bureau is requesting an appropriation of \$2,345,000 and 288 positions for 1960. This represents an increase of \$178,500 and 15 positions over the 1959 regular appropriation and the 1959 supplemental request for additional funds due to the increased costs caused by the pay increases.

Most of the impact of work resulting from the enactment of successive amendments to the Social Security Act is of a continuing nature. Consequently, a large proportion of Bureau staff time has been, and will continue to be, devoted to continuing operating responsibilities, i.e., developing and interpreting policies, reviewing and acting on State plan material, answering specific questions raised by the States and regional offices processing grants to States, answering inquiries from the public, and responding to pressing assignments made from within the Social Security Administration and the Department, including those resulting from studies or inquiries initiated by the Congress and other organizations.

During the latter part of 1959—and continuing into fiscal year 1960—Bureau staff assistance, both technical and clerical, will be provided to the Advisory Council on Public Assistance. Provision was made by the Social Security Amendments of 1958 for an Advisory Council to review the status of the public assistance program in relation to the old-age, survivors, and disability insurance programs; the fiscal capacities of the States and Federal Government; and other factors bearing on the amount and proportion of the Federal and States' share in the program. The Council is to be composed of the Commissioner of Social

Security, as Chairman, and 12 other members, 11 of whom were recently appointed by the Secretary, representing various segments of the American public and the several professional competencies required to appraise the Federal-State public assistance programs. The Council is to report its findings and recommendations to the Secretary and to the Congress by January 1, 1960.

The increased workload in continuing responsibilities results in less staff time being available for the type of leadership needed to assist the States in strengthening their public assistance programs and thus serving needy people more effectively. The expenditure of \$178,500 in additional funds appears to be a sound investment for undertaking constructive work toward improving Federal-State programs involving over \$2 billion in Federal funds and over 5 million needy persons.

SALARIES AND EXPENSES, CHILDREN'S BUREAU

STATEMENT OF MRS. KATHERINE B. OETTINGER, CHIEF, CHILDREN'S BUREAU; ACCOMPANIED BY ARTHUR J. LESSER, M.D., DIRECTOR, DIVISION OF HEALTH SERVICES; MISS MILDRED M. ARNOLD, DIRECTOR, DIVISION OF SOCIAL SERVICES; WILLIAM L. MITCHELL, COMMISSIONER OF SOCIAL SECURITY; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For necessary expenses in carrying out the Act of April 9, 1912, as amended (42 U.S.C., ch. 6), and title V of the Social Security Act, as amended (42 U.S.C., ch. 7, subch. V), including purchase of reports and material for the publications of the Children's Bureau and of reprints for distribution, **[\$2,000,000]** \$2,300,000: *Provided*, That no part of any appropriation contained in this title shall be used to promulgate or carry out any instructions, order, or regulation relating to the care of obstetrical cases which discriminate between persons licensed under State law to practice obstetrics: *Provided further*, That the foregoing proviso shall not be so construed as to prevent any patient from having the services of any practitioner of her own choice, paid for out of this fund, so long as State laws are complied with: *Provided further*, That any State plan which provides standards for professional obstetrical services in accordance with the laws of the State shall be approved."

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$2,000,000	\$2,300,000	\$2,300,000
Supplemental appropriation.....	172,000		
Total.....	2,172,000	2,300,000	2,300,000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. State and local health services for children....	84	\$744,980	87	\$769,003	87	\$769,003
2. State and local social services for children....	46	404,277	49	439,634	49	439,634
3. Technical assistance to States and communi- ties for juvenile delinquency programs	18	171,382	21	197,649	21	197,649
4. Research in child life and services for children	44	319,255	44	320,394	44	320,394
5. Information for parents and others working with children.....	24	282,401	24	322,791	24	322,791
6. Administration.....	34	249,705	34	250,529	34	250,529
7. 1959 program obligated in 1958.....		-4,871				
Total	250	2,167,129	259	2,300,000	259	2,300,000
1959 appropriation available in 1958.....		+4,871				
Total obligations.....	250	2,172,000	259	2,300,000	259	2,300,000

Obligations by objects

Object classification	1959 estimate		1960 estimate		House allowance	
Total number of permanent positions.....	250		259		259	
Full-time equivalent of all other positions.....	1		3		3	
Average number of all employees.....	231		237		237	
Number of employees at end of year.....	233		242		242	
Average GS grade and salary.....	8.9	\$7,388	8.9	\$7,450	8.9	\$7,450
01 Personal services.....	\$1,717,500		\$1,784,621		\$1,784,621	
02 Travel.....	151,300		163,338		163,338	
03 Transportation of things.....	1,500		1,500		1,500	
04 Communication services.....	25,500		26,085		26,085	
05 Rents and utility services.....	500		500		500	
06 Printing and reproduction.....	122,800		162,611		162,611	
07 Other contractual services.....	3,500		3,500		3,500	
Services performed by other agencies.....	19,500		19,790		19,790	
08 Supplies and materials.....	15,000		15,378		15,378	
09 Equipment.....	10,200		12,902		12,902	
11 Grants, subsidies, and contributions.....	103,700		108,775		108,775	
15 Taxes and assessments.....	1,000		1,000		1,000	
1959 program obligated in 1958.....	-4,871					
Total obligations.....	2,167,129		2,300,000		2,300,000	

772 LABOR-HEALTH, EDUCATION, WELFARE APPROPRIATIONS

Summary of changes

	Positions	Amount
1959 actual appropriation.....	250	\$2,000,000
1959 supplemental appropriation.....		172,000
Total appropriation.....	250	2,172,000
1960 appropriation request.....	259	2,300,000
Change requested.....	+9	+128,000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
INCREASES				
For mandatory item: Extra day of pay (261 days in 1959 and 262 days in 1960).....		\$7,163		\$7,163
For program items:				
To provide consultation on group feeding practices of children.....	1	9,006	1	9,006
To provide consultation on speech and hearing services for children.....	2	12,430	2	12,430
To provide assistance to staff engaged in analysis of State child welfare legislation.....	1	4,764	1	4,764
To provide staff needed to assist in putting into effect changes resulting from the 1958 amendments to pt. 3 of title V of the Social Security Act.....	2	12,169	2	12,169
For expenses of the Advisory Council on Child Welfare Services.....		17,000		17,000
To provide consultation to States and communities on the control of juvenile delinquency.....	3	25,657	3	25,657
For increased congressional distribution of "Infant Care" and resumption of free distribution of single copies of publications for parents.....		29,811		29,811
Additional amount for printing of technical publications and publications for parents.....		10,000		10,000
Change requested.....	9	128,000	9	128,000

List of new positions

	Grade	Posi- tions	Annual salary
1. State and local health services for children:			
Institutional dietary consultant.....	GS-12.....	1	\$8,341
Speech and hearing consultant.....	GS-12.....	1	8,341
Clerk-stenographer.....	GS-4.....	1	3,765
Total positions and annual salaries.....		3	20,447
2. State and local social services for children:			
Plans analyst.....	GS-12.....	1	8,341
Legislative clerk.....	GS-7.....	1	4,992
Fiscal clerk.....	GS-5.....	1	4,056
Total positions and annual salaries.....		3	17,389
3. Technical assistance to States and communities for juvenile delinquency programs:			
Juvenile court and probation consultant.....	GS-13.....	1	9,901
Training consultant.....	GS-13.....	1	9,901
Clerk-stenographer.....	GS-4.....	1	3,765
Total positions and annual salaries.....		3	23,567
Total positions and annual salaries.....		9	61,403

1960 REQUEST

Senator HILL. We are glad to have you with us, Mrs. Oettinger.

Mrs. OETTINGER. I have some summary statements here. Shall we start on "Salaries and expenses, Children's Bureau"?

The Department is requesting an appropriation of \$2,300,000 for "Salaries and expenses" for 1960, an increase of \$128,000 over the amount of \$2,172,000 estimated to be appropriated for this purpose for the current fiscal year. This increase covers nine positions, the expenses of the newly established Advisory Council on Child Welfare Services, increased distribution of the Bureau's publications for parents, and a slight expansion in printing of technical publications, and a mandatory item of \$7,163 for the extra day of pay in 1960.

Under its basic act of 1912, the Bureau is charged with investigating and reporting "upon all matters pertaining to the welfare of children and childlife among all classes of our people." The Bureau studies many types of conditions affecting the lives of children, provides data and makes recommendations to improve practices in child health and child welfare programs, and helps establish standards for the care of children.

WORK UNDER TITLE V

Under title V of the Social Security Act, the Bureau administers grants to States for three programs: (1) maternal and child health services, (2) crippled children's services, and (3) child welfare services. For these programs the Bureau develops policies, reviews and approves State plans and budgets, and provides technical consultation to State agencies in carrying out their plans.

The appropriation request is to enable the Bureau to carry out its combined responsibilities under these two laws. Of the nine additional positions requested, three would be for the health services. One of these would provide nutritional consultation to institutions for mentally retarded children; the second would provide consultation on speech and hearing services; and the third position is for a clerk-stenographer. Three of the nine positions would be for social services for children and youth. One would be for a plans analyst to assist in carrying the increased workload resulting from the 1958 amendments to the child welfare provisions of the Social Security Act, the second would be for a legislative clerk to assemble and collate comparative data on State child welfare legislation, and the third is for a fiscal clerk. The remaining three positions would be for juvenile delinquency services. One of these would be for an additional consultant on juvenile court and probation services, the second, an additional training consultant, and the third is for a clerk-stenographer.

ADVISORY COUNCIL ON CHILD WELFARE

The Bureau anticipates that the major work of the Advisory Council on Child Welfare Services will occur during the first half of the fiscal year 1960. The 1960 estimate, therefore, provides for an increase of \$17,000 to cover Council costs. These funds are to cover the \$10,000 cost of three Council meetings in 1960, including statutory per diem fees and travel expenses. The total also includes \$7,000 for temporary staff to serve the Council for the first 6 months of 1960 as it studies child welfare services.

An increase of \$39,811 in printing funds is proposed. Of this, \$29,811 would be for increasing congressional distribution of infant care in response to increased requests and for resumption of free distribution of single copies of publications for parents to individuals who request them. The Bureau discontinued this practice in 1954 to conserve printing funds. The remaining \$10,000 would be for meeting the constantly growing demand for printing of technical publications. This demand will be further enlarged by the effect of the 1958 child welfare amendments.

Senator HILL. The Budget allowed you these funds?

Mrs. OETTINGER. That is true.

ORIGINAL REQUEST TO BUDGET BUREAU

Senator HILL. Did you request more than this from the budget?

Mrs. OETTINGER. Did we request?

Senator HILL. Did you request more than the budget allowed you?

Mrs. OETTINGER. Yes, we asked for 36 positions.

Senator HILL. You asked for 36 instead of the 9 which you were allowed.

Mrs. OETTINGER. Yes, sir.

Mr. KELLY. Mr. Chairman, the request from the Social Security Administration to the Department was \$2,592,000. The Department's preliminary and final requests were each \$2,515,000, and the final allowance was \$2,300,000.

Senator HILL. The Department's final request allowed how many positions?

Mr. KELLY. 286, as against 259 included in the President's budget.

Senator BIBLE. How about the Children's Bureau?

Mr. KELLY. That is what I was speaking of.

Senator HILL. That is 286 against 259?

Mr. KELLY. That is correct, sir.

Senator HILL. That would be 27 positions difference.

Mr. KELLY. Yes.

Senator HILL. Out of the 27, they allowed instead of the 27?

Mr. KELLY. They allowed 18 less than the request, so they allowed 9 out of the 27.

Senator HILL. How were you going to use these 27 positions?

RESEARCH UNDER REQUESTED FUNDS

Mrs. OETTINGER. We were going to use them in each of the program divisions. There were more requested in the Research Division. We needed eight new positions and we were permitted none in that case.

Senator HILL. In research, you say?

Mrs. OETTINGER. In research.

Senator HILL. Give us a picture of that research.

Mrs. OETTINGER. The Bureau's Research Division has two main activities. One has to do with the gathering of statistics. We have to know how many children are adopted, how many children are born to mothers who are not married, how many children are children of working mothers, and many other vital matters of information of this sort. We also have a clearinghouse of all the research studies that

are being done in the country at this time as they pertain to children and youth.

Senator HILL. You mean studies by State and local agencies or non-profit agencies?

Mrs. OETTINGER. And foundations and universities. The clearinghouse issues a widely used publication. It is sold through the Government Printing Office in excess of 5,000 copies a year. We understand that this helps many research workers in the fields of medicine and social service and related fields.

A third activity of the Research Division has to do with some findings of new studies such as, for example, our concern with adoption. Do independent adoptions result in more maladjustments between families than those that are carefully designed with the help of social agencies?

Senator HILL. Where there are more careful screenings.

Mrs. OETTINGER. Where they are more carefully screened and there is a matching between the adoptive parents and the child, and also the protection of the natural parent in this situation. So we are concerned to know just how effective the work is in this field.

EFFECT ON CHILDREN OF WORKING MOTHERS

We have also been concerned this last year about the effect upon children of mothers who work. This, of course, as you know, is an increasing problem with double the number of mothers going to work in 1959 as went to work in 1950.

Senator HILL. I quite agree with you, my dear lady. I guess I am old fashioned, but I still feel that mother's first duty is to the child. There is a disposition on the part of some mothers, at least, to go get a job and just hire somebody to take care of the child. Isn't that true?

Mrs. OETTINGER. We are looking for facts in the case.

Senator HILL. In other words, you are trying now to analyze and see what the situation is.

Mrs. OETTINGER. What constitutes this great increase and how much of it stems from real economic necessity, how much of it extends from greater need for parent education, how much is doing practical damage to the children that are involved in this situation, and how many of these children have careful plans made for their care while their mothers are away, either with relatives or with proper child caring institutions.

Senator HILL. You want to go into that more fully.

Mrs. OETTINGER. We would like to.

Senator HILL. How many positions would it take to make that study?

Mrs. OETTINGER. It would be hard to pluck that one study out of the air. We could supply that for the record, if you like.

Senator HILL. Will you supply that for the record, and the number of positions and what it would cost.

(The information referred to follows:)

For this work it is estimated that five positions and \$35,000 would be required in the fiscal year 1960.

Mrs. OETTINGER. That constitutes the three aspects of our research in child life. Statistical, the clearinghouse, and the study of current issues and problems in the field of child welfare.

INCREASE FOR HEALTH SERVICES

Then one of the other areas where we asked for an increase was health services where we felt that we needed to study staphylococcus infection in hospitals. We asked for three people for that. We felt a team was important because there has been an increasing death rate in the hospitals in the country. We felt that a pediatrician and a pediatric nurse who were intimately acquainted with the problem would be necessary. We wanted that kind of consultation available. We wanted to have two people for speech and hearing. We have been allowed one.

Senator HILL. You wanted two instead of one.

Mrs. OETTINGER. Yes.

Senator HILL. How would these two functions work if you had them both, or how will the one that you have been allowed function?

INCREASE FOR SPEECH AND HEARING PROGRAM

Mrs. OETTINGER. I should answer and then perhaps Dr. Lesser may want to make an additional comment, because he has been close to the problem, of the increased help we can give to children in speech and hearing.

As an increasing number of States become interested, some start with an audiometer test. Others have whole teams who are able to use not only the new mechanical facilities for hearing, which are available to very young children with very great effect, but all of their teamwork is focused toward a complete evaluation, diagnosis and study of the child, so that at the earliest possible age this can be reduced to a minimum, and his greatest capacity be maintained for his growth and development at an early stage. Maybe Dr. Lesser wants to add to that.

Dr. LESSER. I think you responded very well, Mrs. Oettinger. We don't have anyone on our staff at all who is in any way trained in speech and hearing. There are about 3 million children who receive audiometer tests every year through the maternal and child health program, and about 18,000 who get care through the crippled children's program. It seemed to us most important as more States discover that they can give more constructive help, particularly to young children, in this problem, that we ought to have a person on our staff who is skilled and qualified in this area to give us some leadership and to represent the Children's Bureau in this technical field.

INCREASE FOR OCCUPATIONAL THERAPY

Mrs. OETTINGER. An occupational therapist was also requested.

Senator HILL. How many of those did you ask for?

Mrs. OETTINGER. One. You know most of our services are carried on through consultative services with the States. They reach out to us for aid where they feel they need the aid of a specialist who has the kind of status that they can trust. Moreover, because of the very fact that this specialist consults with all the States, there is an interchange of experience and information that the States find very valuable. We have, as you know, many one-of-a-kind people, and the occupational therapists are those whose field is increasing in the knowledge of what they can do to rehabilitate the children.

CONSULTANTS FOR FOSTER CARE

In social services we wanted eight positions for regional consultation in foster care. We have nine regional offices. Of these nine regional offices we have one with a consultant in foster care. That demonstration has been very satisfactory, and we would like to make it available to the other eight regions. As you know, the area of foster care is a sensitive one and a child who is placed in foster care needs to have the careful work not only while the child is in the home, but with the parents with the hope that we can return some of these children to their natural homes.

Senator BIBLE. Might I ask a question there, Mr. Chairman? Just how does the Children's Bureau get into this particular field of foster homes? I thought that was a complete State function. Do you fit into that area?

Mrs. OETTINGER. We stimulate and help the States in their work with foster care. Much of the expense of the placement of the child and the board of the child in the foster home, you are quite correct, is borne by the States. But the trained personnel that is needed is frequently a person who is placed on the Federal payroll, and who works with the States on their foster care programs, either from our national office in Washington, or from our regional offices. But a single consultant in our main office is not sufficient. We need it on a regional level because a great many of these people who are operating in the States recognize themselves the need for complete trained understanding in this field where we are learning so much about better ways of taking care of the child in his foster home.

Senator BIBLE. How many specialists do you have in the field of foster care in the Federal level?

Mrs. OETTINGER. One.

Senator BIBLE. And you are asking for eight?

Mrs. OETTINGER. There is one in the regional office I mentioned, and then the one in the central office.

Senator BIBLE. You are asking for eight?

Mrs. OETTINGER. To go to additional regional offices.

RELATIONS WITH COURTS

Senator BIBLE. How does one get to be a Federal foster child specialist? This field rather intrigues me as a practicing lawyer. I know it would the judges who have to handle these adoption and placement cases. Do they welcome this type of service?

Mrs. OETTINGER. Indeed, yes.

Senator BIBLE. The judges?

Mrs. OETTINGER. The Federal foster care specialist would deal with other foster care specialists within the State and actually would have, unless requested, very little direct contact with a judge of a particular jurisdiction.

Senator BIBLE. Then you are not saying that we would have some Federal foster child specialist come out to my State and say that they felt that the child should go in this home rather than that home? They would not do that?

Mrs. OETTINGER. It would be rather a training opportunity as well as a consultation opportunity. For example, these specialists are frequently called on when a new plan or a new procedure is being

worked out as well as to update them in the most modern methods and to help with institutes, workshops and training of that sort which they themselves arrange. You may ask our Miss Arnold, who is here for details of it because she herself was a foster care specialist before she came to be the Director.

WORK OF PLACEMENT AND FOSTER CARE SPECIALISTS

Senator BIBLE. I also like to see these specialists in problems of placement and foster care, but I will not trespass on the committee's time.

Senator HILL. I would like to see exactly what these people will do.

Senator BIBLE. I did not know how much time the chairman had on this particular field.

Senator HILL. We will take the time. Miss Arnold.

Miss ARNOLD. I think you have to realize first that foster care of children is a big part of the child welfare programs in the States. About 73 percent of the money that is spent by the States is for the foster care of children. These are children who are placed in either foster family homes, where board is being paid for their care, or in adoptive homes or free homes or children who are placed in institutions. The States are asking for a great deal of help from us in how to work out better foster care programs. They want help in setting up their standards. All the States have standards for their foster homes and institutions. Practically every State licenses these foster homes and institutions. They want help in the standards they set up. They want help in how to find foster homes. They want help on how to supervise the children in the foster homes. These regional people go into the States and work mainly with the child welfare people in the State welfare departments help them to carry out their job better.

One of the things they have been doing is to get the States to look at why the children are in foster homes and whether it is possible to place some of them back in their own homes. Some of the States are amazed, for instance, when they find that many of their children are coming to them because they are neglected or abused by their parents. They are trying to help families so they can keep children in their own homes.

Senator BIBLE. You mean the States can't work this out themselves on their own level and their own foster child problem? You are saying that they have to come to the Federal Government for assistance.

Miss ARNOLD. They want help very much. They are asking for help.

Senator BIBLE. Who wants it?

Miss ARNOLD. Mainly the people in the State welfare departments who are handling these cases, the supervisors and the workers.

PRESENT LEVELS OF SPECIALISTS

Senator BIBLE. Do I understand that as of today on the Federal level we have one Federal foster child specialist? Am I correct?

Miss ARNOLD. There was a mistake there. We have two, one consultant in each of two regions. One in the region in San Francisco and one in the region in Charlottesville. Then we have three people who are working in our central office on foster care here in Washington.

Senator BIBLE. You are one of those three?

Miss ARNOLD. I am Director of the Division. There are three on my staff in Washington. One of them is working entirely on services to unmarried mothers and on what we call independent adoption placements. Those are placements for adoptions not made through social agencies. Another one is giving a great deal of time to the problem of intercounty adoptions, children coming from other countries to adoptive homes here. The third one is giving his time entirely to helping to raise the standards of children's institutions in the country. He is a specialist in institutional care of children. Those are the three in the Washington office, in addition to the two in the regional offices.

Mrs. OETTINGER. I think your definition is a little broader than mine of what constitutes foster care. I thought the Senator was pinpointing more to foster care as it relates to the boarding care of children.

QUESTION OF NEED FOR FEDERAL HELP

Senator BIBLE. That is what I primarily referred to. I was surprised that we had to come to the Federal Government to get assistance on that problem, but maybe I am in error. As I understand it, you have two who do that specific work. Am I correct?

Mrs. OETTINGER. Yes, that is right.

Senator BIBLE. You say the need exists and your request for the additional eight is based upon the fact that people in child welfare services within the States themselves are now coming to Washington, D.C., and saying "We need some help from you for our foster placement problems?"

Mrs. OETTINGER. They are not coming to Washington, D.C., actually. We do have regional representatives, and I think they are more acutely aware of this need in their own region. I think it is done on a really highly local basis. This has been so universally true in all the regions that we have felt that we really ought to increase the number that are available to regions. We have the one in Charlottesville and the one in San Francisco, and they are so successful that other people are eyeing this with a great deal of desire to duplicate.

Senator BIBLE. You say the San Francisco area is very successful?

Mrs. OETTINGER. Yes.

Senator BIBLE. You base your conclusion on what—how do you conclude it is successful?

Mrs. OETTINGER. I think one of the large things was the number of requests the foster care representative gets for service and then the number of really successful institutes that she has carried on where many people come quite voluntarily to spend their time and the agency's time to wrestle with some of the problems of the hard-to-place child. In foster care, we are trying more and more to take children that formerly we would have thought a home could not be found for. We used to leave them in institutions. I speak of children who are blind, children who are mentally retarded, children who have handicaps of amputations, and so forth. Even lately children with emotional problems have been placed in the kind of foster home that we felt would be competent to deal with these children so they could live in their own communities and not have the isolation of institutionalized life, and then reeducated again to live in

normal circles. We try to have as enlarging a circle of foster care as possible, and recruitment of these people is very difficult as well as the sustained supervision needed while the children are in the home.

Senator BIBLE. Thank you very much.

Mr. MITCHELL. May I suggest this, that the way you phrased the question suggested that the inadequacies of the State people have to be bolstered by this Federal service. I think rather it is an exchange of information among professional people who are trying to do the best possible job they can. The people on the Federal level have the opportunity to see what is going on at a nationwide basis, and thus serving as a clearing house and also using their professional advice to the end that every State has the benefit of the best practices in all States. There are complicated individual problems, however well qualified you might be; you can learn by consultation with a professional associate. That is what I think is basically involved here.

Senator BIBLE. I was just interested in exploring the problem. Mr. Chairman, I shall certainly do so at a future time when I have a little time to get into it. This rather intrigues me.

Senator HILL. I am delighted you explored it. Are there any other questions?

Senator BIBLE. No.

FEDERAL-STATE RELATIONS IN FOSTER CARE

Senator BYRD. Mr. Chairman, I would like to clarify this a little bit in my own mind. I would like to ask two questions. Is my understanding correct in saying that the Bureau has no jurisdiction as such over the State agency in the decisions which it makes with regard to placing children in foster or adoptive homes? You are merely acting in an advisory capacity?

Mrs. OETTINGER. In the true sense of consultation. We give the best information we know. We give the most scientific and updated advice, and then it rests with the State to apply this as they see fit.

Senator BYRD. Your Bureau, of course, has no appellate jurisdiction over the State's action in this regard?

Mrs. OETTINGER. No. On the contrary, our jurisdiction ends with the approval of the State plan.

Senator BYRD. You have no control over the State agency insofar as this decision involves placing children in the various homes for adoption or for foster care?

Mrs. OETTINGER. No, except as they desire us to give whatever advice we have. Then they are free to apply this as they will.

Senator HILL. They can take it or leave it, as they see fit.

Mr. OETTINGER. Yes.

Senator BYRD. I wonder, Mr. Chairman, if the fact that the States are desirous of having additional assistance in this regard might indicate that the States really are trying to shift part of their financial burden to the Federal Government and that they see an opportunity in this way to do it?

Mrs. OETTINGER. I think it is more largely professional help they are seeking. Professional in the sense that this is a growing field, new information. I have not the sense that it is a fiscal consultation. It is much more in how to do it from the social service aspect.

Senator BYRD. Would they not accomplish a fiscal victory were they able to draw the Federal Government more into the field?

GRANTS FOR FOSTER CARE

Miss ARNOLD. I would like to say with regard to the grant money that we grant to the States, very little is used for foster care. They can use it according to our policy, but only about 5 percent of the total amount of grants have been used for foster care of children. That amounts to less than 1 percent of the total amount the State spends for foster care. They have used the money for staff to really give service to children.

Senator BYRD. Maybe I didn't make myself understood. With the increase in Federal positions that the Congress makes possible, does it not ease the burden upon the States somewhat in a financial way? If you have 9 additional positions here, or if it were 20 or 35, would it not reflect itself in easing the work upon the various State agencies that are involved in this process?

EXPENDITURES BY STATES

Mr. MITCHELL. From a financial standpoint, I think that would be infinitesimal. How much did you say was being spent on foster care by the States?

Miss ARNOLD. Around \$115 to \$116 million a year.

Mr. MITCHELL. That is in relation to the number of people whom we are talking about here. I don't think we could gainsay that many of the States would not like to have Federal aid in meeting this problem. It is a tremendous problem and growing and very expensive, although not as expensive as some other ways of dealing with children who are bereft. I hope that there is no confusion here between the personal services money that is spent for consultation and the grants. We have not come to the grants appropriation here yet under title V of the Social Security Act. There are funds granted to the States for maternal and child care for crippled children and for child welfare services. In that latter item the funds are granted to the States, and they find their way into some foster care services, and the expenditures of those funds is supervised by these very representatives who are in our regional offices to the end that those funds are spent for the purposes for which they are granted, and that they are spent efficiently and properly.

Senator HILL. Are there any other questions on this? If not, suppose we turn to grants.

Mrs. OETTINGER. You don't want any delineation of the positions?

Senator HILL. Suppose you finish that.

DELINEATION OF POSITIONS

Mrs. OETTINGER. In social services, we have the child welfare program administration specialist and day care specialist.

Senator HILL. What would the day care specialist go to?

Mrs. OETTINGER. That would go to the day care centers that are springing up throughout the country. The States have the responsibility for licensing these as well as giving in-service training to the people who are running the day care centers. There are a number of organizations in this country, national organizations, who are concerning themselves with the day care. There are very active city organizations who are concerning themselves with day care. They are

eager to know whether the standards of their day care centers are acceptable, and what better they could do for children, and what better they could do for the parents in the way of consultations because many of the parents are in need of a great deal of help in making this plan for the child. We need a day care specialist to respond to the national organizations as well as the States who are interested in expanding day care services.

Senator HILL. What is your next office?

Mrs. OETTINGER. The legislative clerk. And we have clerical help to support these positions.

Senator HILL. These are stenographic positions and things of that sort?

Mrs. OETTINGER. Yes. Then in information for parents, editorial positions, you know we proudly say that our publications have four of the five best sellers in the Government. To keep up that high standard, we asked for two more people for informational services to parents.

Senator HILL. That is for your pamphlets and bulletins you get out?

Mrs. OETTINGER. Yes. We ask for one more administrative assistant in our administration services.

Senator HILL. Did you want to indicate, if not at this moment, for the record, what you feel is the priority in needs of these people we have been talking about?

Mrs. OETTINGER. That is always a hard thing to do and I would like to give it thought.

Senator HILL. I realize it is not the kind of thing you would want to shoot from the hip on. You can supply that for the record.

Mrs. OETTINGER. Yes, sir.

(The information referred to follows:)

The 1960 Departmental request to the Bureau of the Budget included 286 positions and \$2,515,000 for the Children's Bureau, an increase of 36 positions and \$343,000 over 1959. The President's budget included 259 positions and \$2,300,000, an increase of 9 positions and \$128,000. A priority listing of the 27 positions not included in the President's budget follows:

Priority 1: State and local social services for children—day care consultation, 2 positions-----	\$14, 133
Priority 2: Research in child life and services for children—studies and analysis, 8 positions-----	58, 104
Priority 3: State and local health services for children—consultation on staphylococcus infection, 4 positions-----	29, 271
Priority 4: State and local social services for children—regional consultation on foster care, 6 positions-----	54, 030
Priority 5: State and local social services for children—consultation on child welfare program administration, 2 positions-----	14, 133
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Priority 6:	
a. State and local health services for children—regional nutrition consultant, 1 position-----	9, 276
b. State and local social services for children—consultation on recruitment and training, 2 positions-----	14, 395
c. Information for parents and others working with children—	
Editor-writer for Children's Bureau publications, and clerical assistant-----	11, 658
Printing and reproduction-----	10, 000
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Total priority 6, 5 positions-----	45, 329
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Total 27 positions-----	215, 000

Senator HILL. Your statement will appear in full in the record.
(The statement referred to follows:)

STATEMENT OF CHIEF OF CHILDREN'S BUREAU, SOCIAL SECURITY ADMINISTRATION,
ON SALARIES AND EXPENSES, CHILDREN'S BUREAU

INCREASE REQUESTED

The 1960 estimate for "Salaries and expenses, Children's Bureau" represents an increase of \$128,000 over the amount of \$2,172,000 estimated to be appropriated for this purpose for the fiscal year 1959. This increase covers 9 positions, the expenses of the newly established Advisory Council on Child Welfare Services, increased distribution of the Bureau's publications for parents and a slight expansion in printing of technical publications, and a mandatory item of \$7,163 for the extra day of pay in 1960.

FUNCTIONS OF THE CHILDREN'S BUREAU

The legal authority under which the Children's Bureau serves the children of the United States is contained in the basic act of April 9, 1912, creating the Bureau (42 U.S.C., ch. 6) and in title V of the Social Security Act under delegations by the Secretary of the Department of Health, Education, and Welfare, and the Commissioner of Social Security (42 U.S.C., ch. 7, subch. V).

Under its basic act of 1912, the Bureau is charged with investigating and reporting "upon all matters pertaining to the welfare of children and child life among all classes of our people." The Bureau studies many types of conditions affecting the lives of children, provides data and makes recommendations to improve practices in child health and child welfare programs, and helps establish standards for the care of children.

Under title V of the Social Security Act, the Bureau administers grants to States for three programs: (1) maternal and child health services, (2) crippled children's services, and (3) child welfare services. For these programs, the Bureau develops policies, reviews and approves State plans and budgets, and provides technical consultation to State agencies in carrying out their plans.

SIGNIFICANT TRENDS

Population

During the past year, there has been an upward revision of 2 million in the number of children under 18 it is estimated will be in the national population by 1965; from 70 million to 72 million. The number of families in the United States increased from 39,303,000 in 1950 to 43,714,000 in 1958.

Mobility

Twenty percent of our total population moves each year. The number of children between the ages of 1 and 17 who move with their families increased from 9 million in 1950 to 12 million in 1958.

Working mothers

The number of working mothers with children under 18 has reached another alltime high of 7 million. Thirteen percent of the children between the ages of 6 and 11 have to care for themselves while their mothers work.

Juvenile delinquency

In each of the 9 years from 1948 to 1957, juvenile delinquency court cases increased. Over that period of time, the increase in the delinquency cases was five times as great as the increase in the child population of juvenile court age.

Health services

The number of infants who have been served in well-child conferences alone more than doubled between 1947 and 1957. The number of States with programs for mentally retarded children has grown from 4 to 44 in the past 3 years. The number of children with congenital heart disease who received medical services under State crippled children's programs increased from 2,000 in 1950 to 10,000 in 1957.

In the light of these trends, the Children's Bureau during the next fiscal year is shaping its program so as to contribute most effectively to the strengthening of healthy family life in a mobile society and to stress the prevention of those

conditions which adversely affect the health and welfare of children, through helping communities adapt their programs to changing conditions.

Through those specific programs for which the Children's Bureau carries responsibility, as well as through cooperative relationships with a wide variety of public and voluntary organizations, the Bureau tries to help the Nation move forward in expressing its concern for the well-being of all children.

For example, the Children's Bureau provides the secretariat for the Interdepartmental Committee on Children and Youth. There are 11 major branches of the Federal Government with 34 units which have programs related to children and are represented on this Committee. Both in the exchange of information and in the stimulation and strengthening of cooperative relationships in programs concerning children, this Committee has proved an effective mechanism.

Through it, the Bureau is in close touch with the National Council of State Committees for Children and Youth, composed of both State and Territorial committees which give leadership to programs for children and youth. In turn, the Interdepartmental Committee is a clearinghouse of information for the National Council.

Through this secretariat, the Bureau also works closely with the Council of National Organizations with a membership of over 200 national professional and voluntary health and welfare agencies whose programs include concern for the well-being of children.

These three groups, the Interdepartmental Committee, the National Council of State Committees for Children and Youth, and the Council of National Organizations have a continuing relationship which sustains national interest in and action on the White House Conference recommendations during the interim years.

On May 27, 1958, President Eisenhower issued a call for the 1960 White House Conference on Children and Youth. The estimate for carrying forward the Bureau's part of the planning for this Conference is discussed under "Salaries and expenses, White House Conference on Children and Youth."

PROGRAM EMPHASES IN 1959 AND 1960

Great population, economic, and social changes are occurring in our country. Gaps exist in what is being done and needs to be done for children. The Bureau's long-range plans take into account these changes and gaps. Its immediate plans must be selective, within its broad mission, and fashioned to its limited resources.

Following is a résumé of principal activities to be undertaken in 1959 and 1960 which the Bureau regards as of highest priority in its on-going programs.

STATE AND LOCAL HEALTH SERVICES FOR CHILDREN

Rapid advances in medical knowledge, the rising child population, rising costs of medical care, and population shifts which bring large groups of people to previously unsettled areas and new concentration in cities are factors which affect health services throughout the Nation.

In administering grants for maternal and child health and crippled children's services under title V of the Social Security Act, the Bureau's health services staff is working with State maternal and child health and crippled children's agencies in every State in meeting those problems which changing conditions bring.

The Bureau's health services staff is composed of specialists in medical and related fields, such as pediatrics, nursing, physical therapy, medical social work, nutrition, and mental retardation.

These staff members are available to the States for consultation and also work with national voluntary organizations whose programs concern the health of children. Through continuing relationships with the Nation's leading medical schools, the staff of the Bureau is able to offer balanced counsel responsive to diversified interests as goals are charted which will bring most significant advances in programs for children.

Consultation to the State health departments on mental retardation programs which provide diagnostic, counseling, and casework services will continue to be a major activity of Children's Bureau staff. In order to make this work most effective, the Bureau coordinates its efforts with those of other Federal agencies participating in the Department of Health, Education, and Welfare Committee on Mental Retardation and with various national organizations.

It continues to hold national conferences and institutes with members of the various professions who work with mentally retarded children. In the fiscal year 1958, for example, over 100 people participated in a national conference on community health services. As one result of this conference, a technical committee advisory to the Division of Health Services has been formed. It met in September 1958 and affirmed the need expressed by the national conference to pay particular attention to early casefinding and treatment of phenylketonuria, one cause of mental retardation, which can be detected early by a simple diaper test.

Also during fiscal year 1958, the Bureau, the North Carolina State Department of Health and the University of North Carolina School of Public Health sponsored the first institute on mental retardation ever held for nutritionists and dietitians of health departments and institutions.

The proposed position for an institutional dietary consultant in 1960 would answer a need expressed by State health agencies, who have indicated they want to provide nutrition consultation to the directors of institutions or residential schools for mentally retarded children. Consultation also would be given to the directors of those group-care facilities which care for the children during the day, and where providing a proper diet calls for skilled supervision. A dietary consultant on the staff of the Bureau with special experience in administering food services for children in institutions would provide an important service in improving group feeding practices for mentally retarded as well as other children.

In most States, programs for hard of hearing children, especially preschool children, are still inadequately developed, have limited geographic coverage, or are lacking. Only about one-half of the State health departments and crippled children's agencies are engaged in speech and hearing services. These vary from audiometric testing of schoolchildren to comprehensive programs for the conservation of hearing. The proposed position of speech and hearing consultant on the staff of the Children's Bureau would be of help to the States in the further development of their services through technical consultation, participation in institutes and in-service training, and preparation of program guides. It is known that the deterioration of hearing in many children can frequently be halted and normal hearing restored through prompt attention. Where hearing loss is permanent, early diagnosis, care and training will usually make it possible for these children to lead normal lives.

Through a cooperative arrangement between the Children's Bureau and the Children's Committee of the Prosthetics Research Board, National Research Council, 12 major child amputee clinics have launched cooperative studies of ways of fitting infants and young children with artificial arms and legs. The arrangement grew out of a conference held in August 1958.

Over 100 State and local maternal and child health personnel attended an institute on perinatal casualties financed by the Children's Bureau and conducted jointly by the University of Minnesota and the University of Michigan, Schools of Public Health. The group discussed the problems of preventing the 165,000 deaths each year associated with the prenatal and neonatal period, as well as the prevention and care of handicapping conditions associated with pregnancy and delivery.

STATE AND LOCAL SOCIAL SERVICES FOR CHILDREN

The 1958 amendments to the Social Security Act made major changes in provisions for grants for child welfare services. For the first time, Federal child welfare funds are available for services to children living in urban areas on the same basis as to children in rural areas. The amendments also provide for a new formula for the allotment of Federal funds, and authorization of reallocation of these funds; and matching with State and local funds, beginning with the 1960 fiscal year. Additionally, these amendments provide for the establishment, for a 1-year period, of an Advisory Council on Child Welfare Services, which will advise the Secretary of Health, Education, and Welfare and will make recommendations to effectuate the 1958 amendments.

These changes will have far-reaching significance for child welfare programs in the States. Bureau staff are giving special emphasis in 1959 and 1960 to assisting the States to strengthen their programs through implementation of the amendments.

As a first step in implementing these amendments, the Bureau met with State welfare administrators and child welfare directors in October 1958 to discuss necessary policy changes. The Bureau then issued revised policies on the amendments immediately effective. Additional revisions will be needed to put the matching requirements into effect in 1960.

The Secretary has appointed the Advisory Council on Child Welfare Services and this group will hold its first meeting during the current fiscal year. It is charged with reporting its findings and recommendations, including recommendations for changes in the provisions of part 3, title V of the Social Security Act, to the Secretary and to the Congress on or before January 1, 1960.

The Bureau anticipates that the major work of the Council will occur during the first half of the fiscal year 1960. The 1960 estimate, therefore, provides for an increase of \$17,000 to cover Council costs. These funds are to cover the \$10,000 cost of three Council meetings in 1960, including statutory per diem fees and travel expenses. The total also includes \$7,000 for temporary staff to serve the Council for the first 6 months in 1960 as it studies child welfare services.

The 1960 estimate provides for the addition of one professional position to assist in carrying the increased workload resulting from the amendments. This position is for a plans analyst to assist in plan review and the development of material for assisting State agencies in extension of services to urban areas and of policies and procedures relating to matching, cost allocation and reallocation.

The Bureau will continue in 1960 to give emphasis to helping the States in improving State child welfare legislation. The "Principles and Suggested Language for Legislation on Public Child Welfare and Youth Services," issued by the Bureau in 1958, provides general guides and is being widely used by State agencies, code commissions, and law schools. The Bureau's specialist on child welfare legislation is helping regional child welfare representatives, State agencies, and legislative commissions to adapt these guides to individual State situations, and is concentrating in 1959 and 1960 on the development of guides for legislative language relating to termination of parental rights and to adoptions.

If the Bureau is to move ahead in the development of a complete State child welfare legislation handbook, this specialist must have additional help. The Bureau is continually receiving requests from international, national, and State organizations for comparative information on child welfare laws which it is unable to supply. Within the past year, many States have requested assistance with proposals for State child welfare legislation. Therefore, the 1960 estimate includes an increase for a legislative clerk who will tabulate changes in State legislation, assemble, classify, and collate data for use in meeting these requests.

During 1959 the Bureau is giving high priority to program areas designed to alleviate the stresses on family life brought about by efforts to maintain the family in time of crisis and by the ever-increasing numbers of working mothers.

Cooperative efforts initiated by the Children's Bureau are culminating in a National Conference on Homemaker Service, scheduled for February 1959, which is planned as a major effort to stimulate the expansion of homemaker service in the States. One facility which helps to prevent the breakup of a home is the provision of a homemaker in times of crisis, such as illness or death of the mother. The development of this service has been very slow in this country. Participants in conference planning included 25 national health and welfare organizations and 6 units of the Department. Preconference preparation included a compilation of a directory of homemaker services, the publication of a popular pamphlet interpreting homemaker service, and a study of the availability of homemaker services. National, State and local agencies will be involved in the Bureau's conference followup and its efforts to continue to stimulate the development of this service. In addition, the Bureau will use the guides and standards which grow out of the conference as a basis for future consultation.

In 1959, in cooperation with the Women's Bureau of the Department of Labor, the Children's Bureau is conducting a survey of national agencies, public and voluntary, to determine their interests, concerns and programs in day care of children. During 1959 one or two conferences will be sponsored by the Children's Bureau to review the information available from various sources and to consider steps which should be taken by National, State and local agencies in providing day care facilities and services.

TECHNICAL ASSISTANCE TO STATES AND COMMUNITIES FOR JUVENILE DELINQUENCY PROGRAMS

Juvenile delinquency continues to be one of the major problems in the United States and few communities have escaped the impact of its continuing national

rise. With the increased mobility of population, the expansion of suburban areas, and more rapid transportation, among other trends, juvenile delinquency can no longer be thought of as being confined within the boundaries of neighborhoods, local communities, or even States.

For the 9th consecutive year (1948-57), juvenile delinquency cases have continued to rise, reaching an all-time high of 603,000 cases involving 520,000 children. The increase in the number of these cases coming before juvenile courts was almost five times as great as the increase in the child population of juvenile court age (10 to 17) during these 9 years.

Not only the number of cases, but the proportion of children involved, has steadily risen. In 1948, about 12.6 out of every 1,000 children (10 to 17), came to the attention of juvenile courts for alleged juvenile delinquency. By 1957 this rate had mounted to 23.5 out of every 1,000 children—almost double the 1948 rate.

Even if juvenile delinquency remains fixed at the 1957 rate, the number of juvenile delinquency cases may be expected to increase by 140,000 in 1962, and 205,000 cases in 1965, simply because of the estimated increase in the number of children aged 10 to 17 that will occur by these years. The States are already falling further and further behind in dealing with this problem. Greater stimulation and help by the Federal Government are needed now so that resources of State and local programs will be geared to meeting this foreseeable need for expanded services and, in turn, these youth may be restored to a wholesome way of life as quickly and fully as possible.

The 1960 estimate provides for an increase of two professional positions in the Bureau's Division of Juvenile Delinquency Service to enable providing more technical assistance to States and communities. One of these positions would be for a consultant in juvenile court and probation services. At the present time the Bureau has one consultant for these services. During 1958 this consultant provided consultation to juvenile courts in many States on such matters as courtroom procedure, detention care, and court-community agency relationships. In collaboration with the Division's training consultant or with national organizations, such as the National Probation and Parole Association or the National Council of Juvenile Court Judges, the consultant also conducted or participated in a variety of national, regional, or State training institutes or workshops.

There are about 3,000 juvenile courts in the country. Services in these courts, for the most part, have not kept pace with developments either as to the volume of the services needed or as to the application of up-to-date methods and principles for dealing with children and youth. Because of its present inability to meet requests for help in this field, the Bureau is not only unable to be as effective as it should be in assisting the courts in improving their services but is also unable to provide necessary staff time to continue the development of standard setting and guide materials which are greatly needed. With the addition of another position the Bureau would be able to give more attention to the development of guide materials, such as a guide to communities on detention care.

The second position requested is for a training consultant. One of the pressing needs of the juvenile delinquency field is for trained personnel. Only 1 out of 10 of the probation officers have had specialized training for their jobs through the completion of social work training. Approximately 4 out of every 10 of the 2,000 local probation officers working exclusively with children lack a college degree and are not eligible for advanced training. Also there are approximately 225 detention homes and 200 public training schools at both the State and local level that are staffed for the most part with unskilled, untrained people.

There is a tremendous need for expansion of in-service training programs and workshops to improve the skills of those workers on the job who are not eligible or cannot afford to return for more academic training. There is equally great need to work with the agencies in the field and the schools of social work in building up a far greater supply of persons with the necessary skills to treat and rehabilitate emotionally disturbed children. Because of the urgent need to expand training in the field of juvenile delinquency, an additional consultant is requested in 1960.

During the past year Division staff has provided consultation to a variety of agencies concerned with the training of workers in the field of juvenile delinquency. There has been consultation to schools of social work on the needs

of agencies in their vicinity and on plans for appropriate courses or institutes to meet those needs. During the year two documents on training in the juvenile delinquency field were issued by the Bureau.

RESEARCH IN CHILD LIFE AND SERVICES FOR CHILDREN

In carrying out its function to investigate and report upon matters pertaining to the welfare of children, the Bureau attempts quantitatively and qualitatively to determine how children in the United States are faring, and what physical and social conditions are inimical to their well-being.

Quantitatively, and on a regular basis, the Bureau assembles data to answer such questions as:

How many children are adopted each year? By whom? At what age?

How many children are in foster family care or in institutions because of dependency and neglect?

How many professional workers serve children in child welfare programs?

How many children are in training schools for delinquent youth?

How many children come before the courts each year because of delinquent behavior?

How many children and mothers receive maternal and child health services? How many are immunized? What types of immunization do they receive?

How many children, with what kinds of disabilities, receive care under State crippled children's programs?

How many mothers and infants die? How many babies die from causes associated with prematurity?

National, State, and local, public and voluntary organizations look to the Children's Bureau for this information, which is useful in a variety of ways in the planning and execution of their programs.

The Bureau also conducts and fosters studies of conditions detrimental to the well-being of children. Because it does not have a large research staff, it usually undertakes this kind of research in conjunction with other organizations, public and private. The Bureau also advises other organizations on how to plan and conduct studies aimed at promoting the well-being of children.

Its earliest studies were concerned with infant and maternal mortality and the Bureau has continued research activities in this field up to the present. With the reduction over the years in mortality in late infancy, current emphasis focuses upon the period around birth, in which the great majority of fatalities to infants occur. At the present time the Bureau is providing advice on the planning and conduct of several studies which may have a bearing on this problem. One is a pilot study in Hartford, Conn., to demonstrate the usefulness of uniform statistics in evaluating and improving maternal and newborn infant services in hospitals. This project is being carried on jointly by the Bureau, the American College of Obstetricians and Gynecologists, the American Academy of Pediatrics, and the Connecticut Department of Health. The Bureau is also participating on the AMA Committee on Maternal and Child Health which is currently developing guides for studies of perinatal mortality.

Infant mortality has shown an upturn for the first time in many years. In the light of this fact, the Bureau is giving particular attention to this problem in the hope of finding ways of helping to reverse this trend.

In exploring the needs of children of working mothers and ways of meeting them, the Children's Bureau requested the Bureau of the Census to include a series of questions in its population survey to show how many of such children there are and the kinds of plans made for their care in their mothers' absence in May 1958. From this background material and the help of knowledgeable people in this field, the Bureau will be able to make recommendations concerning maternal employment and measures needed to safeguard the health and welfare of the children involved.

Through its Clearinghouse on Research Relating to Children, the Bureau provides information on research currently underway throughout the country. This clearinghouse is used by psychologists, educators, public health workers, social workers, psychiatrists, and others to encourage multidisciplinary research and to point up the gaps in present research efforts.

Parents, professional workers, public and voluntary professional and lay groups seek the help of the Bureau for information or sources of information on various aspects of child growth and development.

INFORMATION FOR PARENTS AND OTHERS WORKING WITH CHILDREN

The Bureau continues to reach a wide public audience through its publications for parents. In March 1958, the Superintendent of Documents reported that 4 out of the 5 best-selling Government publications were Children's Bureau publications for parents. They are Infant Care, Prenatal Care, Your Child from 1 to 6, and Your Child from 6 to 12. In October 1958, President Eisenhower presented the 40 millionth copy of Infant Care to a representative young American family in White House ceremonies.

An increase of \$39,811 in printing funds is proposed. Of this \$29,811 will be used for increased congressional distribution of Infant Care to meet increased requests for this publication for parents of our burgeoning child population. These funds will also be used for the resumption of free distribution of single copies of publications to parents who request them. The Bureau discontinued this practice in 1954 to conserve printing funds. It believes that up-to-date information on child rearing should be available to parents on their request. Those persons who make quantity requests for publications will continue to be directed to the Superintendent of Documents where they may purchase these publications.

Although distribution (including sales) of Bureau technical and professional publications account for much smaller totals than publications for parents, they are increasingly in demand by administrators and professional workers in programs for children, both governmental and nongovernmental. These include materials on services for handicapped, mentally retarded, neglected, or delinquent children, on school-health services, homemaker service, and adoption standards. An increase of \$10,000 is also requested to meet the constantly growing demand for printing of the Bureau's technical publications. This demand will be further enlarged by the effect of the 1958 amendments to the child welfare provisions of the Social Security Act.

Mrs. OETTINGER. Would you like me to read our grants summary statement?

Senator HILL. Yes, unless there are further questions here.

Senator BIBLE. No, I have nothing further right now.

GRANTS TO STATES FOR MATERNAL AND CHILD WELFARE

APPROPRIATION ESTIMATE

"For grants to States for maternal and child-health services, services for crippled children, and child-welfare services as authorized in title V, parts 1, 2, and 3, of the Social Security Act, as amended (42 U.S.C., ch. 7, subch. V), \$43,500,000, of which \$15,000,000 shall be available for services for crippled children \$16,500,000 for maternal and child-health services, and \$12,000,000 for child-welfare services: *Provided*, That any allotment to a State pursuant to section 502(b) or 512(b) of such Act shall not be included in computing for the purposes of subsections (a) and (b) of sections 504 and 514 of such Act an amount expended or estimated to be expended by the State: *Provided further*, That \$1,000,000 of the amount available under section 502(b) of such Act shall be used only for special projects for mentally retarded children."

Amounts available for obligation

Description	1959 appropriations	1960 budget to Congress	1960 House allowance
Appropriation or estimate-----	\$43, 500, 000	\$43, 500, 000	\$46, 500, 000
Anticipated supplemental for congenital heart disease-----	1, 500, 000	-----	-----
Total obligations-----	45, 000, 000	43, 500, 000	46, 500, 000

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
11 Grants, subsidies, and contributions-----	\$45, 000, 000	\$43, 500, 000	\$46, 500, 000

Summary of changes

	Amount
1959 actual appropriation-----	\$43, 500, 000
1959 supplemental appropriation-----	1, 500, 000
Total appropriation-----	45, 000, 000
Deduct nonrecurring supplemental-----	—1, 500, 000
Revised base-----	43, 500, 000
1960 appropriation request-----	43, 500, 000
Change requested-----	

	1960 budget estimate (amount)	1960 House allowance (amount)
Increases:		
For grants to States for—		
Maternal and child health services-----		\$1, 000, 000
Services for crippled children-----		1, 000, 000
Child welfare services-----		1, 000, 000
Change requested-----		3, 000, 000

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$3 million for grants to States for maternal and child welfare services. As the Secretary indicated this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee the following statement is submitted in explanation of how this increase, if enacted, would be applied.

Maternal and child health services

With respect to the maternal and child health program, the House Appropriations Committee report states that it expects the Children's Bureau "to intensify efforts to assure that all children, regardless of their ability to pay, receive the benefits of poliomyelitis vaccinations." The States might also use part of the \$1 million additional funds to increase the number of well-baby clinics, to provide more funds for clinics for mentally retarded children and for services for prematurely born infants.

Crippled children's services

The increase of \$1 million in crippled children's services grant funds provided by the House would be used generally to extend services under the program to more children. Under the crippled children's programs the States provide care not only to children with orthopedic handicaps but also to those with a wide variety of nonorthopedic handicaps, including cerebral palsy, epilepsy, speech and hearing defects, and congenital malformations, especially congenital heart disease.

Child welfare services

The increase of \$1 million in child welfare services provided by the House would be used to expand and improve State and local programs primarily through additional staff, the training of additional workers, and to extend services in urban areas. Most of the child welfare services funds are used for salaries and for training of personnel providing services.

As stated by the Secretary when he appeared before the committee such an increase would further contribute to inflation and weakening of the national economy. It is recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

Grants to States for maternal and child health services

State	President's budget 1960	House allowance	State	President's budget 1960	House allowance
Alabama.....	\$357,051	\$384,008	Nevada.....	\$97,712	\$98,482
Alaska.....	98,941	99,833	New Hampshire.....	105,237	106,757
Arizona.....	128,621	137,110	New Jersey.....	236,784	251,434
Arkansas.....	202,941	217,525	New Mexico.....	121,548	124,697
California.....	682,423	732,661	New York.....	578,047	619,187
Colorado.....	138,887	143,766	North Carolina.....	541,535	583,610
Connecticut.....	153,103	159,401	North Dakota.....	109,590	111,545
Delaware.....	103,162	104,475	Ohio.....	567,975	610,218
District of Columbia.....	114,078	116,481	Oklahoma.....	173,243	185,140
Florida.....	330,054	354,481	Oregon.....	141,935	151,401
Georgia.....	419,246	451,159	Pennsylvania.....	648,129	696,949
Guam.....	92,640	92,904	Puerto Rico.....	340,015	365,625
Hawaii.....	110,074	112,077	Rhode Island.....	111,327	113,455
Idaho.....	109,513	111,460	South Carolina.....	319,384	343,486
Illinois.....	392,814	420,259	South Dakota.....	111,146	113,257
Indiana.....	327,167	351,066	Tennessee.....	366,552	394,300
Iowa.....	230,826	247,413	Texas.....	653,039	702,315
Kansas.....	182,025	194,642	Utah.....	119,980	122,972
Kentucky.....	332,756	357,824	Vermont.....	100,850	101,933
Louisiana.....	335,038	360,029	Virgin Islands.....	91,146	91,261
Maine.....	116,249	118,868	Virginia.....	371,437	399,392
Maryland.....	220,804	236,411	Washington.....	176,444	188,380
Massachusetts.....	221,621	234,756	West Virginia.....	200,605	214,953
Michigan.....	491,921	528,203	Wisconsin.....	287,027	307,860
Minnesota.....	274,530	294,491	Wyoming.....	99,944	100,936
Mississippi.....	327,020	351,808	Special project for M. R.....	1,000,000	1,000,000
Missouri.....	282,664	303,086	Reserve fund B.....	1,812,500	1,937,500
Montana.....	110,808	112,885			
Nebraska.....	129,892	133,873	Total.....	16,500,000	17,500,000

Grants to States for maternal and child health service—Special projects for mentally retarded children, 1959

Alaska.....	\$32,096	Nevada.....	\$57,058
Arizona.....	35,893	New Mexico.....	47,350
Arkansas.....	45,147	New York.....	45,600
Colorado.....	24,281	Ohio.....	40,000
District of Columbia.....	42,038	Oklahoma.....	46,598
Florida.....	37,549	Pennsylvania.....	56,792
Georgia.....	25,810	Rhode Island.....	34,927
Hawaii.....	32,282	Tennessee.....	37,661
Idaho.....	27,000	Texas.....	17,139
Illinois.....	41,605	Virginia.....	52,784
Maine.....	15,939	Washington.....	56,541
Maryland.....	7,500	Wisconsin.....	18,488
Massachusetts.....	25,030		
Michigan.....	27,641		
Minnesota.....	44,251		
Missouri.....	25,000		
		Tentative estimate of payments to 28 States, 1959.....	1,000,000

Grants to States for services for crippled children

State	President's budget 1960	House allowance	State	President's budget 1960	House allowance
Alabama.....	\$383,869	\$413,135	Nevada.....	\$91,499	\$92,262
Alaska.....	90,416	91,051	New Hampshire.....	98,253	99,808
Arizona.....	115,264	118,816	New Jersey.....	209,115	223,683
Arkansas.....	238,544	256,193	New Mexico.....	109,657	112,551
California.....	460,706	494,576	New York.....	432,052	472,786
Colorado.....	128,485	137,158	North Carolina.....	567,772	611,854
Connecticut.....	136,226	142,239	North Dakota.....	102,585	104,649
Delaware.....	95,513	96,747	Ohio.....	489,712	526,666
District of Columbia.....	101,183	103,083	Oklahoma.....	207,920	223,006
Florida.....	297,993	320,146	Oregon.....	141,525	151,262
Georgia.....	431,563	464,622	Pennsylvania.....	596,904	642,437
Guam.....	86,338	86,495	Puerto Rico.....	369,130	397,268
Hawaii.....	100,929	102,798	Rhode Island.....	103,541	105,717
Idaho.....	102,649	104,720	South Carolina.....	332,921	358,142
Illinois.....	363,527	390,164	South Dakota.....	103,095	105,219
Indiana.....	315,485	338,973	Tennessee.....	384,061	413,328
Iowa.....	249,702	268,120	Texas.....	716,898	772,342
Kansas.....	176,538	189,080	Utah.....	109,785	112,694
Kentucky.....	370,909	399,163	Vermont.....	94,239	95,323
Louisiana.....	323,484	347,816	Virgin Islands.....	85,764	85,854
Maine.....	107,873	110,558	Virginia.....	373,095	401,404
Maryland.....	171,856	183,873	Washington.....	178,198	190,770
Massachusetts.....	189,491	201,756	West Virginia.....	240,408	258,175
Michigan.....	424,967	456,817	Wisconsin.....	293,338	315,132
Minnesota.....	279,415	300,152	Wyoming.....	93,347	94,326
Mississippi.....	335,697	361,194	Reserve fund B.....	1,875,000	2,000,000
Missouri.....	286,307	307,511			
Montana.....	102,521	104,578			
Nebraska.....	132,736	141,808			
			Total.....	15,000,000	16,000,000

Grants to States for child welfare services

State	President's budget 1960	House allowance	State	President's budget 1960	House allowance
Alabama.....	\$338,512	\$338,512	Nebraska.....	\$148,946	\$148,946
Alaska.....	63,589	63,589	Nevada.....	57,120	57,120
Arizona.....	122,079	122,079	New Hampshire.....	73,688	75,046
Arkansas.....	228,650	228,650	New Jersey.....	140,412	257,249
California.....	455,339	589,908	New Mexico.....	114,019	114,019
Colorado.....	143,597	143,597	New York.....	371,411	626,500
Connecticut.....	110,216	115,154	North Carolina.....	524,185	524,185
Delaware.....	64,215	64,215	North Dakota.....	114,826	114,826
District of Columbia.....	40,000	70,306	Ohio.....	475,729	492,324
Florida.....	270,399	287,249	Oklahoma.....	205,255	205,255
Georgia.....	391,223	391,223	Oregon.....	164,325	164,325
Guam.....	47,393	47,393	Pennsylvania.....	518,623	594,420
Hawaii.....	69,171	81,828	Puerto Rico.....	310,809	310,809
Idaho.....	99,546	99,546	Rhode Island.....	57,812	83,839
Illinois.....	363,811	437,815	South Carolina.....	305,045	305,045
Indiana.....	314,915	314,915	South Dakota.....	110,541	110,541
Iowa.....	253,315	253,315	Tennessee.....	347,248	347,248
Kansas.....	183,586	183,586	Texas.....	590,820	653,256
Kentucky.....	350,291	350,291	Utah.....	94,005	107,995
Louisiana.....	288,347	288,347	Vermont.....	74,809	74,809
Maine.....	106,014	106,014	Virgin Islands.....	41,726	45,116
Maryland.....	177,102	192,531	Virginia.....	365,535	365,535
Massachusetts.....	142,270	245,893	Washington.....	192,165	192,165
Michigan.....	405,464	441,569	West Virginia.....	246,703	246,703
Minnesota.....	280,821	280,821	Wisconsin.....	291,687	291,687
Mississippi.....	306,978	306,978	Wyoming.....	65,030	65,030
Missouri.....	280,777	280,777			
Montana.....	99,906	99,906	Total.....	12,000,000	13,000,000

The Social Security Act Amendments of 1958 changed the allotment formula for child welfare services by including as a factor total population in place of rural child population and adding per capita income as a factor. It was also provided that no State shall receive less under the new formula than it would have received prior to the enactment of the 1958 Social Security Act Amendments with an appropriation of \$12 million. These changes account for the fact that many States receive the same allotment under a \$13 million appropriation as under a \$12 million appropriation.

BUDGET ESTIMATE

Mrs. OETTINGER. The estimate of \$43,500,000 continues the 1959 amount for each of these grant programs; namely, \$16,500,000 for maternal and child health services, \$15 million for crippled children's services, and \$12 million for child welfare services.

Services provided under the maternal and child health services program include prenatal clinics, well-baby clinics, immunizations, care of premature infants, and health services for children of school age. During the fiscal year 1959, 30 States are spending \$1,300,00 of Federal material and child health services funds for special projects for mentally retarded children. All of the \$1 million earmarked by Congress for these projects and an additional \$300,000 have been allocated and budgeted. Fourteen other States have programs financed by regularly apportioned Federal funds and State and local funds. The total budget for these 44 programs is about \$2 million.

The crippled children's services program provides services for locating crippled children and for providing medical, surgical, corrective, and other care and services for children who are crippled or who are suffering from conditions which lead to crippling. A 1959 supplemental appropriation of \$1,500,000 is being requested for crippled children's services, to be used exclusively for services for children with congenital heart disease. In order to provide for the most effective utilization of the funds, it is proposed that the funds appropriated remain available until June 30, 1960.

The child welfare program provides social services for the protection and care of homeless, dependent, and neglected children, and children in danger of becoming delinquent. The Social Security Act Amendments of 1958 made major changes in the child welfare provisions of the act, including, among others, (1) removal of the previous provisions of the law limiting the use of Federal child welfare funds to areas predominantly rural and other areas of special need, thereby making services under these funds available to children in urban areas on the same basis as to children in rural areas; (2) addition of a requirement for matching Federal funds with State and local funds, effective beginning with fiscal year 1960; and (3) authorization of reallocation of Federal child welfare funds.

EFFECT OF HOUSE ACTION

The House Committee on Appropriations in acting on the appropriations for the Department of Health, Education, and Welfare for 1960 increased the President's budget by \$3 million for "Grants to States for maternal and child welfare services." As the Secretary indicated, this increase is contrary to the fiscal policy of the President. However, at the request of the Senate Appropriations Committee, the following statement is submitted in explanation of how this increase, if enacted, would be applied.

MATERNAL AND CHILD HEALTH SERVICES

With respect to the maternal and child health program, the House Appropriations Committee report states that it expects the Children's Bureau "to intensify efforts to assure that all children, regardless of their ability to pay, receive the benefits of poliomyelitis vaccinations."

The States might also use part of the \$1 million additional funds to increase the number of well-baby clinics, to provide more funds for clinics for mentally retarded children, and for services for prematurely born infants.

CRIPPLED CHILDREN'S SERVICES

The increase of \$1 million in crippled children's services grant funds provided by the House would be used generally to extend services under the program to more children. Under the crippled children's programs the States provide care not only to children with orthopedic handicaps but also to those with a wide variety of non-orthopedic handicaps, including cerebral palsy, epilepsy, speech and hearing defects, and congenital malformations, especially congenital heart disease.

CHILD WELFARE SERVICES

The increase of \$1 million in child welfare services provided by the House would be used to expand and improve State and local programs primarily through additional staff, the training of additional workers, and to extend services in urban areas. Most of the child welfare services funds are used for salaries and for training of personnel providing services.

As stated by the Secretary when he appeared before the committee, such an increase would further contribute to inflation and weakening of the national economy. It is recommended, therefore, that the increase over the President's budget be eliminated by the Senate.

Senator HILL. Your statement will appear in full in the record. (The statement referred to follows:)

STATEMENT OF CHIEF OF CHILDREN'S BUREAU ON GRANTS TO STATES FOR MATERNAL AND CHILD WELFARE

The 1960 estimate continues the 1959 amounts for maternal and child health services (\$16,500,000), crippled children's services (\$15 million), and child welfare services (\$12 million).

The Social Security Act Amendments of 1958 increased the amounts authorized for annual appropriation for each of the three grant programs under title V by \$5 million: Maternal and child health services from \$16,500,000 to \$21,500,000, crippled children's services from \$15 million to \$20 million, and child welfare services from \$12 million to \$17 million. In addition, these amendments extended grants to Guam under all three programs, effective for the fiscal year 1960. The amendments also made a number of major changes in the child welfare provisions of the law.

In 1960 State agencies will continue to use the grants for the three programs under title V for providing health and welfare services to mothers and children. In determining the most effective uses of these funds for extending and strengthening these services, States will continue to take into account in their planning the marked rise in child population, increasing costs of health and welfare services, and gaps in the respective programs in the individual States.

There are several developments in the programs for which the Children's Bureau administers grants which we think have significance at this time.

MATERNAL AND CHILD HEALTH SERVICES

Grants are provided to enable States to extend and improve services for promoting the health of mothers and children, especially in rural areas and areas suffering from economic distress. The States must provide matching funds for one-half of the amount appropriated; the remainder is not matched and is distributed to the States on the basis of financial need of each State for assistance in carrying out its plans.

State plans for the use of maternal and child health funds are made by State health agencies. The services are largely provided by local health departments.

Under each of the appropriation acts since 1957, Congress has earmarked \$1 million of the maternal and child health funds to be only for special projects for mentally retarded children. The States are continuing to use these funds earmarked by the Congress to initiate and expand programs of service to mentally retarded children. Within the past 3 years, the number of States with programs for mentally retarded children has grown from 4 to 44.

For the fiscal year 1959, 30 States are spending \$1,300,000 in special project grant funds from the Children's Bureau on projects covering a wide gamut of approaches to the needs of the mentally retarded child. Fourteen other States have programs financed by regularly apportioned Federal funds and State and local funds. The total budget for these 44 programs is about \$2 million.

These projects usually include one clinic, which can accept from 200 to 300 children a year. A great many requests for service have been stimulated from parents of the retarded because of these clinics.

Training opportunities for professional health staff, such as physicians, nurses, nutritionists, medical social workers, are being financed in practically all States by maternal and child health funds.

The main emphasis of the maternal and child health programs for which the Children's Bureau administers grants is on prevention. With over 4 million children being born each year, early health care for mothers and children become increasingly important. While the maternal mortality record in this country gives us reason for satisfaction, we still face the fact that deaths associated with childbearing in 1956 totaled over 165,000, of which 1,700 were maternal, over 85,000 were deaths of infants before or during birth, and 79,000 were infants under 1 month of age. And among the infants who did not die, there were many who will be handicapped all their lives.

Medical prenatal and postnatal clinic services were given to 241,000 mothers during 1957. Children attending medical well-child conferences numbered 1,326,000. General pediatric clinics provided diagnoses and consultation for 147,000 children. State health departments provided expert medical care in hospital premature centers for 5,200 prematurely born infants.

About 2,206,000 schoolchildren were examined by physicians in school health services. Vision screening tests were given to 4,089,000 children and hearing tests to 2,908,000 children. Some 1,715,000 children received smallpox immunizations, 2,967,000 diphtheria immunizations. Maternal and child health programs gave 11,809,000 children their polio immunizations.

CRIPPLED CHILDREN'S SERVICES

Grants are made to the States to extent and improve services for locating crippled children, and for providing medical, surgical, corrective, and other care and services for children who are crippled or who are suffering from conditions which lead to crippling. The States are required to provide matching funds for half of the amount appropriated; the remainder is not matched and is distributed to the States on the basis of financial need of each State for assistance in carrying out its plan.

State plans for crippled children's services are developed by the State crippled children's agency and services provided by State and local agencies.

A 1959 supplemental appropriation of \$1,500,000 is being requested for crippled children's services, to be used exclusively for services for children with congenital heart disease. In order to provide for the most effective utilization of the funds, it is proposed that the funds appropriated remain available until June 30, 1960.

The high cost of surgery for children suffering from congenital heart conditions and increasing demands for such surgery have exhausted funds available to support State programs for the current fiscal year. The number of children with congenital heart disease who receive medical services under State crippled children's programs increased from 2,000 in 1950 to 10,000 in 1957. It is estimated that 80 percent of the estimated 50,000 infants born each year with congenital heart defects can be cured by surgery.

New medical knowledge and scientific techniques increasingly are being put to work to help children with the congenital absence of one or more extremities lead more normal lives. Recently 30 State crippled children's agencies reported they had provided medical services for over 2,000 child amputees, most of them congenital. Two special project grants have been used to develop information for the use of all States on how to fit prostheses to young children and how the loss of a limb affects the child's growth and development. Through a third

special project grant, 12 major child amputee clinics are now collaborating on studies of the best kinds of artificial limbs for children and the best age for fitting those limbs.

Interest is increasing in providing care for children with cystic fibrosis in the State crippled children's programs. Nine States now make specific provision for these children. With proper care, many of them can survive the most critical early years.

Some 125,000 new cases were among the 313,000 children who received physicians' services under the crippled children's program in 1957. Forty percent of the expenditure of crippled children's funds goes for hospital care. Some 52,000 children received this care, averaging 24.4 days. There was a 6 percent increase in the number of children attending diagnostic clinics—to 246,000. These children made 506,000 clinic visits.

CHILD WELFARE SERVICES

Federal grants are provided to enable the States to establish, extend, and strengthen child welfare services for the protection and care of homeless, dependent, and neglected children and children in danger of becoming delinquent; and services for the return of runaway children to their own homes in other States. The law provides that State plans for child welfare services be developed jointly by the State public welfare agency and the Children's Bureau. The State agency administers the plan and services are provided by the State and local agencies.

In addition to increasing the amount authorized for annual appropriation, the Social Security Act Amendments of 1958 made these major changes in the child welfare provisions of the act:

(1) Expansion of services under this program to urban children on the same basis as to rural children. Previously, the law limited the use of Federal child welfare funds to areas predominantly rural and to other areas of special need.

(2) Revision of the formula for allotment of Federal funds so that allotment will be in direct proportion to total child population and in inverse proportion to State per capita income, provided that no State shall receive under the new formula less than it would have received prior to the 1958 amendments under an appropriation of \$12 million.

(3) Addition of new requirement for matching Federal child welfare funds with State and local funds, effective beginning with the fiscal year 1960.

(4) Authorization permitting the reallocation of Federal child welfare funds.

(5) Extension of the use of Federal funds for the return of children up to 18, instead of up to 16 as previously provided, as well as for maintenance of the child pending his return.

(6) Establishment for 1 year of an Advisory Council on Child Welfare Services of 12 persons. This Council is to report its findings and recommendations, including recommendations for changes in the child welfare provisions of the Social Security Act, to the Secretary and to the Congress on or before January 1, 1960.

The Congress appropriated \$12 million for grants for child welfare services for the fiscal year 1959, an increase of \$2 million over the amount appropriated for 1958. The funds for 1959 had been appropriated and apportioned to the States prior to the enactment of the 1958 amendments. Although the State plans were initially submitted for using funds in accordance with the provisions of the law prior to the amendments, the States will be using some of the increased funds for services to urban children, and improving provisions for the return of runaway children.

A major purpose of child welfare services is prevention—prevention of family breakdown, and early help to children with social problems so that these problems will not become so serious that they hamper the child's optimum development of a healthy personality.

Tension and strains in modern life are bringing their toll. The number of broken homes is rapidly increasing. State welfare departments are continually reporting the referral of more children who are neglected, abused or exploited by their parents. Some States report that children now coming for care are more emotionally disturbed than previously. The number of children involved in delinquent behavior steadily rises. Consequently, State and local public welfare agencies throughout the country are continuing to emphasize expansion and improvement of child welfare services to children and their parents in their

own homes. These preventive services are focused on strengthening family life and averting foster placement of children, and on helping children when the first signs of trouble appear. At the present time, about 38 percent of the 340,000 children receiving child welfare services from State and local public welfare agencies are in their own homes or in the home of relatives.

Even with the help of these services, however, State and local public welfare agencies still find it necessary to provide foster care for an increasing number of children. Currently, these agencies are caring for about 149,000 children in foster family homes or in institutions for dependent and neglected children.

From the beginning of the Federal grant-in-aid program for child welfare services, States have recognized that in order to provide the quality of service needed to help children coming to their attention, competent professionally trained staff is required. Because of the scarcity of trained child welfare workers, States have consistently used Federal child welfare funds for the training of these workers in professional schools of social work. Between 1950 and 1955 the percentage of public child welfare employees with 2 years of professional training increased from 19 to 28 percent.

States have gradually expanded coverage of child welfare services. The number of child welfare staffs providing these services increased from 2,863 in 1945 to 6,631 in 1958. Fifty-two percent of the counties in the country now have available the services of public child welfare workers, a rise of 32 percent since 1946. Between 1950 and 1958, estimated expenditures from local, State, and Federal funds went up 68 percent. The greatest proportion of this increase came from State and local funds. During this period it was necessary to increase salaries and to meet higher costs for care of children in foster family homes and in institutions.

RESPONSIBILITIES OF STATES

Senator HILL. These are all grants to States, are they not?

Mr. OETTINGER. All grants to States.

Senator HILL. And the States match them?

Mrs. OETTINGER. They have always matched those that had to do with maternal and child health and crippled children, but in the last amendments, after July 1959 they also match them in relation to child welfare services.

Senator HILL. They will match all of them, won't they?

Mrs. OETTINGER. After 1959, July 1, yes.

Senator HILL. Then they start matching all of them?

Mrs. OETTINGER. Yes.

Senator HILL. The States will have to put up their part of the funds to get the Federal funds, is that right?

Mrs. OETTINGER. Yes.

1959 FUNDS

Senator HILL. Last year you had for these purposes \$45 million, did you not?

Mr. KELLY. Yes. That is the \$43,500,000 plus the special million and a half which is now pending in the supplemental bill for congenital heart disease.

Senator HILL. The \$45 million includes what is in the supplemental bill.

Mr. KELLY. Yes, that is right.

Mr. WYNKOOP. The million and a half will remain available through the next fiscal year.

Senator HILL. Yes, I understand that. It is so made in the supplemental.

Mr. WYNKOOP. Yes.

Senator HILL. What the House has done was to increase your appropriation \$1 million in each one of these categories?

Mr. MITCHELL. That is right.

Senator HILL. That is in grants to the States.

Mrs. OETTINGER. Yes, that is right.

Senator HILL. I appreciate the fact, Mrs. Oettinger, that you are bound by the administration's budget, and the Secretary, and I realize your situation exactly, but speaking from your own personal judgment, these could be effectively and well used by the States, could they not?

Mrs. OETTINGER. Yes, Senator, they could be.

Senator HILL. Are there any questions, gentlemen?

Senator BIBLE. No questions, Mr. Chairman.

GENERAL WELFARE PAYMENTS

Senator BYRD. Mr. Chairman, might I ask a question? Is there Federal participation with the States in the payment of general welfare payments?

Mrs. OETTINGER. No.

Senator BYRD. Approximately how many States require that a person be unemployable?

Mr. MITCHELL. That is in the public assistance program, rather than the children's program.

Senator BYRD. I am not talking about the Bureau. I am talking about the Bureau of Public Assistance. Is there participation there with the States in that category?

Mr. MITCHELL. Not on general assistance, no. Your question went to unemployability in respect to the categories where the Federal Government matches the State expenditures or in general assistance. General assistance has no Federal funds at all. They are State programs. But in aging, dependent children, blind and the permanently totally disabled, the Federal Government participates in those expenditures. In general assistance, a great many States exclude the employables from eligibility for general assistance. I would have to submit for the record the actual number of those States that do that, if that is your question.

Senator BYRD. That is it exactly. My State excludes employables and I was wondering what percentage of the States do not exclude the employables.

Mr. MITCHELL. The public assistance people have left, and I don't have that in my mind. We will submit it for the record, and will be glad to.

Senator HILL. Could you get them to prepare us a memorandum?

Mr. TRUELSON. There are only a handful that do. We will provide the figures for the record.

(The information referred to follows:)

COMPILATION OF STATES ACCORDING TO STATE PROVISIONS FOR GRANTING GENERAL ASSISTANCE TO EMPLOYABLE PERSONS WHO ARE IN NEED, JANUARY 1959

(Preliminary data, not cleared with States, based on information reported by State public assistance agencies in response to a special inquiry on the administration of general assistance, January 1959)

Aid from general assistance available to unemployed employable persons, or families with such persons, on a statewide basis (24 States) :

Alaska ¹	Minnesota	Puerto Rico ³
Connecticut	Montana	Utah ⁴
Delaware	New Hampshire	Vermont
Hawaii ²	New York	Virgin Islands
Kansas ³	North Dakota	Virginia ⁵
Maine	Ohio	Washington ¹
Massachusetts ³	Oregon ¹	Wisconsin
Michigan	Pennsylvania	Wyoming

¹ Not available to nonfamily persons, especially single men.

² Subject to assignment to a work project; not available to couples without children or nonfamily individuals.

³ Availability of employment tested variously for employable persons.

⁴ Limited to 30 days for couples or nonfamily persons if able-bodied.

⁵ Limited to equivalent of 3 months' requirements in any 12-month period.

Aid from general assistance may be given to unemployed employable persons, or families with such persons, under specified conditions, but policy varies among local jurisdiction and is affected by local funds available and local economic conditions (20 States) :

Alabama	Indiana	New Mexico ⁴
Arkansas	Iowa	Rhode Island ²
California ¹	Kentucky	South Carolina
Colorado	Maryland ³	South Dakota
Florida	Nebraska	Tennessee
Idaho	Nevada	Texas
Illinois ²	New Jersey ²	

¹ Financed by local funds; in some counties limited to "off season" periods.

² Majority of population covered by program financed by State-local funds with aid available to employable persons; in other local jurisdictions which use only local funds, policies vary with local discretion.

³ Available through special program with State-local financing; some local jurisdictions do not participate; separate from regular general assistance.

⁴ Not available to couples and nonfamily individuals; available to families with children, temporary emergency aid not to exceed 2 weeks.

Aid from general assistance available only to unemployable persons or families without an employable person (9 States) :

Arizona	Louisiana	North Carolina
District of Columbia	Mississippi	Oklahoma
Georgia	Missouri	West Virginia

WHITE HOUSE CONFERENCE ON CHILDREN AND YOUTH

SALARIES AND EXPENSES

STATEMENT OF MRS. KATHERINE B. OETTINGER, CHIEF, CHILDREN'S BUREAU; ACCOMPANIED BY JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For necessary expenses [of preparation] for a 1960 White House Conference on Children and Youth, [\$150,000] \$200,000: *Provided*, That a conference director may be appointed by the Secretary, without regard to civil service laws and the Classification Act of 1949, as amended, at a salary not to exceed [\$15,000] \$16,500 per annum."

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$150, 000	\$200, 000	\$200, 000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
White House Conference on Children and Youth..	18	\$150, 000	18	\$200, 000	18	\$200, 000

Obligations by objects

Object classification	1959 estimate		1960 estimate		House allowance	
Total number of permanent positions.....	18		18		18	
Full-time equivalent of all other positions.....			4		4	
Average number of all employees.....	13		19		19	
Number of employees at end of year.....	18		6		6	
Average GS grade and salary.....	10. 1	\$7, 553	10. 1	\$7, 553	10. 1	\$7, 553
01 Personal services.....	\$103, 477		\$151, 390		\$151, 390	
02 Travel.....	31, 000		31, 000		31, 000	
04 Communication services.....	1, 857		2, 016		2, 016	
06 Printing and reproduction.....	5, 000		10, 000		10, 000	
07 Other contractual services.....	336		336		336	
08 Supplies and materials.....	710		1, 209		1, 209	
09 Equipment.....	4, 422					
11 Grants, subsidies, and contributions.....	2, 153		2, 324		2, 324	
15 Taxes and assessments.....	1, 045		1, 725		1, 725	
Total obligations.....	150, 000		200, 000		200, 000	

Summary of changes

	Positions	Amount
1959 actual appropriation.....	18	\$150, 000
Deduct nonrecurring equipment costs.....		-4, 422
Revised base.....	18	145, 578
1960 appropriation request.....	18	200, 000
Change requested.....		+54, 422

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
INCREASES				
For mandatory items:				
To annualize 18 permanent positions filled in 1959 for part of year.....		\$17, 982		\$17, 982
Extra day of pay (261 days in 1959 and 262 days in 1960).....		487		487
Subtotal.....		18, 469		18, 469
For program increases:				
Temporary employment to help handle peak load at time of holding the Conference.....		30, 953		30, 953
Printing Conference materials.....		5, 000		5, 000
Change requested.....		54, 422		54, 422

1960 ESTIMATES

Senator HILL. Mrs. Oettinger, are you going to address yourself to the White House Conference on Children and Youth?

Mrs. OETTINGER. I will read the summary statement.

The 1960 estimate proposes an appropriation of \$200,000, an increase of \$50,000 over the amount appropriated for 1959. The 1959 appropriation provides for 18 positions and related expenses for the White House Conference planning. The 1960 estimate provides for continuing these positions through the greater part of the fiscal year. Additional temporary staff is proposed to meet a peak workload during the 6 months immediately preceding the Conference. An increase of \$5,000 is also requested for printing material necessary in preparation for the Conference, Conference programs, and committee reports.

HISTORY OF CONFERENCE

Starting with 1909, a White House Conference on Children and Youth has been held every 10 years. The proposed 1960 Conference, to be held in March 1960, will be the sixth of these Conferences.

The Children's Bureau is the focal point in Government for planning and organizing these Conferences. The President's National Committee has already exercised its initial responsibility for determining the theme of the 1960 Conference. Meeting in Washington in December, the 32 Committee members agreed that the purpose of the Conference would be to "promote opportunities for children and youth to realize their full potential for a creative life in freedom and dignity." The Committee specifically charged the Conference not only with examining achievements of previous White House Conference goals and recommendations but also with determining the action that individuals, organizations, and all levels of Government can take to implement Conference purposes.

A Subcommittee on Finance is following the patterns of financing which were established in the 1950 Conference. In that Conference a substantial part of the costs was derived from private funds. It is contemplated that the only direct Federal contribution would be derived through funds appropriated to the Department.

FUNDS OTHER THAN FEDERAL

Senator HILL. Do you recall how much in private funds were given for the 1950 Conference?

Mrs. OETTINGER. \$275,000.

Senator HILL. In other words, those were funds other than any Federal funds.

Mrs. OETTINGER. Yes. They came from foundations and from individuals and interested organizations.

Senator HILL. Can anyone estimate how much money we will get from private sources for the 1960 Conference?

Mrs. OETTINGER. We have a budget, Senator Hill, that calls for a million dollars, including what the Government would give, and the addition from the private sources. This is set up by the Finance Committee on which Mr. Anderson is the chairman. However, their preliminary attempts to meet this budget led to a rather discouraging report at our executive committee meeting of the White House Conference which we held last week.

Senator HILL. They did not think they could raise as much this time as 10 years ago?

Mrs. OETTINGER. Yes, but their goal is much higher. It is at least double.

Senator HILL. Would the amount of money that the budget has recommended and that is now in the bill conclude the financing for the 1960 Conference as far as the Federal participation is concerned?

FOLLOWUP COMMITTEE

Mrs. OETTINGER. There is a followup. It is the followup committee, Senator Hill, which is very active. I believe that the thing that may distinguish this 1960 White House Conference is the early attention to the followup so that action may come out of this participation of the State committees on children and youth and national organizations and other groups that will be so deeply involved in making proposals that they will also have the need and stimulus to carry through. The followup has been one of the things that has been emphasized and I think the foundations are tremendously interested, and I suspect if we are to continue our partnership that the Federal Government may wish to participate also through the followup period.

Senator HILL. That followup would be in partnership with the private organizations?

Mrs. OETTINGER. Distinctly.

Senator HILL. With private sources of funds?

Mrs. OETTINGER. That is correct.

Senator HILL. Are there any other questions?

Senator BIBLE. I have no questions, Mr. Chairman.

Senator BYRD. No, Mr. Chairman.

Senator HILL. Is there anything else you would like to add?

Mrs. OETTINGER. I think that is all.

Senator HILL. We want to thank you and your staff very much.

Your statement will appear in full in the record at this point.

(The statement referred to follows:)

STATEMENT OF CHIEF OF CHILDREN'S BUREAU, SOCIAL SECURITY ADMINISTRATION, ON SALARIES AND EXPENSES, WHITE HOUSE CONFERENCE ON CHILDREN AND YOUTH

INCREASE REQUESTED

The 1960 estimate proposes an appropriation of \$200,000, an increase of \$50,000 over the amount appropriated for 1959. The 1959 appropriation provides for 18 positions and related expenses for the White House Conference planning. The 1960 estimate provides for continuing these positions through the greater part of the fiscal year. Additional temporary staff is proposed to meet a peak workload during the 6 months immediately preceding the Conference. An increase of \$5,000 is also requested for printing material necessary to preparation for the Conference, Conference programs, and committee reports.

BACKGROUND

Starting with 1909, a White House Conference on Children and Youth has been held every 10 years. The proposed 1960 Conference will be the sixth. The focus of each Conference has been set to meet the most pressing needs of its time. From the first Conference, which resulted in the establishment of the Children's Bureau, each Conference has produced some significant gains for children.

ORGANIZATION OF THE CONFERENCE

The Children's Bureau is the focal point in the Government for planning and organizing these Conferences. Participation of Government agencies will be through the Interdepartmental Committee on Children and Youth, composed of 34 Government agencies whose programs are concerned with children.

State committees on children and youth will serve as central planning points within their respective States in relation to the Conference. These committees have a national organization with which the Children's Bureau cooperate. Basically the White House Conference on Children and Youth is a cooperative venture of Government, citizen groups, and voluntary organizations concerned with the well-being of children and youth.

The President's National Committee has already exercised its initial responsibility for determining the theme of the 1960 White House Conference. Meeting in Washington in December, the 92 Committee members agreed that the purpose of the Conference would be to "promote opportunities for children and youth to realize their full potential for a creative life in freedom and dignity."

The Committee specifically charged the Conference not only with examining achievements of previous Conference goals and recommendations but also with determining action that individuals, organizations, and all levels of government can take to implement Conference purposes. It called for the involvement of all segments of community life in carrying forward the basic Conference theme.

In response to the President's request to the Governors, the States, and Territories either already have established or are in the process of establishing State committees on children and youth to carry out these charges. The efforts of the various States are coordinated through the National Council of State Committees for Children and Youth which already has activated the mechanism for preparing the reports of State committees on conditions affecting children and youth for Conference use and followup.

The President's Committee must give leadership both before and during the Conference. It also will plan for the Conference followup and final report to the President. The Committee is made up of professional and lay citizens with recognized reputations for their interest in and concern with the welfare of children and youth. Its members broadly represent the various professions which serve families and their children. Especial emphasis on citizen involvement already has been expressed in the selection of lay citizen and youth members of the National Committee. This interest is expected to be continued as the States' representation to the Conference is chosen. An Executive Committee, appointed from the members of the National Committee, is undertaking the intensive supervision and planning of the Conference.

A Subcommittee on Finance is following the patterns of financing which were established in the 1950 Conference. In that Conference, a substantial part of the costs was derived from private funds. It is contemplated that the only direct Federal contribution will be derived from funds appropriated to the Department.

BASIC OBJECTIVES

The basic objective of the White House Conference is to provide a decennial benchmark which not only crystallizes the advances of the past decade but insures continuum for the future decade in a concerted national effort to make the most objective contribution toward the improved, long-term well-being of children and youth. The rapidity of change in today's world gives this Conference a strategic significance beyond that of any of its predecessors. Scrutinizing conditions of children requires factfinding, and disseminating information about new research findings from many fields; exploring means of overcoming present lacks and deficiencies in services; and recommending positive community action to assure healthy development of children to their fullest capacity. To this end, the best efforts of State and National, public and voluntary organizations, and the most widespread citizen support will be needed during this and subsequent years. The major focus in 1959 will be on factfinding, and in 1960 on interpretation and dissemination of facts for Conference use and action.

EXPLANATION OF REQUEST

For administrative purposes the White House Conference staff constitutes a separate organizational entity within the Children's Bureau. The 1959 appropriation provides for 18 positions and related expenses for the White House

Conference planning. The 1960 estimates provide for continuing these positions through the greater part of the fiscal year since the Conference will not be held until late in March 1960. In addition, provision is made for temporary staff to meet a peak workload during the 6 months immediately preceding the Conference. After the conclusion of the Conference, it is planned to reduce the regular staff of 18 to 6 as work in connection with planning and arranging for holding the Conference will be over. It is proposed that these six positions be continued until June 1961 to prepare the Conference report and to establish the framework for the followup activities which will be carried on during the ensuing decade.

An increase of \$5,000 for printing is also proposed for the preparation of the following kinds of materials: Background information about the theme of the Conference for the conferees, media for the exchange of information between the State committees and other organizations preparing for the Conference, and Conference programs and committee reports.

GRANTS FOR SOCIAL SECURITY TRAINING AND STUDIES

STATEMENT OF WILLIAM L. MITCHELL, COMMISSIONER OF SOCIAL SECURITY; ACCOMPANIED BY ROY L. WYNKOOP, ADMINISTRATIVE OFFICER, SOCIAL SECURITY ADMINISTRATION; AND JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“For grants to States for increasing the number of adequately trained public welfare personnel, pursuant to section 705 of the Social Security Act, as amended (42 U.S.C. 906), and for making grants, contracts, and jointly financed cooperative arrangements for research or demonstration projects pursuant to section 1110 of said Act, as amended (42 U.S.C. 1310), including necessary expenses of Federal administration, \$1,785,000, of which \$1,000,000 shall be grants under said section 705.”

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	-----	\$1,785,000	0

Obligations by activity

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Training.....	-----	-----	-----	\$1,000,000	0	0
2. Cooperative studies.....	-----	-----	-----	700,000	0	0
3. Administration.....	-----	-----	11	85,000	0	0
Total obligations.....	-----	-----	11	1,785,000	0	0

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
Total number of permanent positions.....		11	
Full-time equivalent of all other positions.....		1	
Average number of all employees.....		10	
Number of employees at end of year.....		11	
Average GS grade and salary.....		8.9 \$6,945	0
01 Personal services.....		\$65,300	
02 Travel.....		4,800	
04 Communication services.....		2,100	
06 Printing and reproduction.....		4,100	
07 Other contractual services.....		1,200	
08 Supplies and materials.....		1,000	
09 Equipment.....		2,600	
11 Grants, subsidies, and contributions.....		1,703,900	
Total obligations.....		1,785,000	0

New positions requested

	Grade	Annual salary
Project director.....	GS-15.....	\$12,771
Project analyst.....	GS-14.....	11,357
Do.....	GS-13.....	9,901
Staff development specialist.....	GS-12.....	8,341
Research analyst.....	GS-12.....	8,341
Administrative assistant.....	GS-9.....	5,990
(1) Fiscal clerk.....	GS-5.....	8,112
(2) Secretary.....	GS-5.....	4,056
(2) Clerk stenographer.....	GS-4.....	7,530
Total (11).....		76,399

Summary of changes

	Positions	Amount
1959 actual appropriation.....		
1960 appropriation request.....	11	\$1,785,000
Change requested.....	+11	+1,785,000

	1960 budget estimate		1960 House allowance	
Increases:				
For program items:				
1. To increase the number of adequately trained State and local public welfare personnel.....	Posi- tions	Amount \$1,000,000	Posi- tions	Amount 0
2. To make grants, contracts, or jointly financed coop- erative arrangements for the conducting of research or demonstration projects in social security.....		700,000		0
3. To finance 11 positions and related costs to adminis- ter the program.....	11	85,000		0
Change requested.....	+11	+1,785,000		0

EFFECT OF HOUSE ACTION

The House, in acting upon this item, disallowed the total amount of the budget estimate. We would like to urge that the committee give favorable consideration to the restoration of the \$1,785,000 requested since we are convinced that the proposed training and studies program would support a constructive effort toward the solution of problems which result in dependency. Although the Federal Government will spend over \$2 billion to provide assistance to needy individuals through the public assistance programs in 1960, very little research is being done to determine the reasons why assistance is required, how persons can be made more self-supporting and self-reliant, or the best ways of administering assistance programs. More information is badly needed about—

- (1) The basic causes of dependency.
- (2) The kinds of services needed to overcome dependency to the greatest extent possible.
- (3) What can be done to identify those families most susceptible of rehabilitation?
- (4) What relationship is there between provision of various kinds of medical care and the prevention of dependency?

We are convinced that the Federal Government, through the initiation of a cooperative program of research and demonstrations, can provide a central focus and a coordinated attack on public assistance and related problems which are national in scope through obtaining a better knowledge of the causes of such problems and how to cope with them. We are also convinced that grants for research and demonstration projects to universities and other research facilities would stimulate an expansion in research into many of the social problems with which we are confronted.

Closely associated with the need for research is the need for trained manpower to administer the four federally aided public assistance programs. By their very nature, the public assistance recipient rolls present a complex pattern of dependency which requires special skill in handling as well as the use of a variety of community services. This may be illustrated by the fact that the aid to the blind and aid to the permanently and totally disabled programs are related to disability, and the old-age assistance case loads often reflect complications of illness or disability associated with aging. Special skills are therefore required to assist individuals with such impairments to achieve self-support or self-care. The aid to dependent children program is based on the requirement of deprivation of parental support through death, absence, or incapacity. This presents problems in retaining the family as a unit, proper care of children, guardianship, etc. Unfortunately, the public assistance agencies presently lack a sufficient number of trained workers with the required skills to cope with these problems. Only about 1 out of 5 of the 37,000 workers in public welfare agencies have had graduate social work training and only about 20 percent of the persons in key administrative and supervisory positions have had some basic social work education. During the current fiscal year, only about 475 public welfare social work employees are receiving special educational training. At the present rate of training, it would take over 20 years to train to meet present minimum needs for skilled workers. In recognition of the great need of training of State and local workers in the welfare departments, the Social Security Act amendments of 1956 carried a temporary authorization for the financing of training of such workers through June 30, 1962.

We have no question but what the expenditure of the funds sought for training grants and for cooperative studies would pay dividends over the years.

*Grants to States for training of public welfare personnel—Tentative estimate, fiscal year 1960*¹

State (in order of per capita income 1955-57)	Amount of grant	State (in order of per capita income 1955-57)	Amount of grant
Total.....	\$1,000,000	Texas.....	\$51,500
Delaware.....	10,000	Arizona.....	10,000
Connecticut.....	10,000	Iowa.....	11,400
New York.....	41,300	Nebraska.....	10,000
California.....	56,100	Maine.....	10,000
District of Columbia.....	10,000	Utah.....	10,000
New Jersey.....	10,000	Virginia.....	10,000
Nevada.....	10,000	Vermont.....	10,000
Illinois.....	22,800	Idaho.....	10,000
Massachusetts.....	19,400	Oklahoma.....	27,100
Ohio.....	23,300	New Mexico.....	10,000
Michigan.....	18,300	Louisiana.....	43,200
Maryland.....	10,000	West Virginia.....	21,300
Washington.....	12,500	North Dakota.....	10,000
Pennsylvania.....	28,700	Georgia.....	33,300
Rhode Island.....	10,000	South Dakota.....	10,000
Indiana.....	10,000	Tennessee.....	30,400
Wyoming.....	10,000	Kentucky.....	27,200
Oregon.....	10,000	North Carolina.....	30,300
Colorado.....	12,400	Alabama.....	40,600
Missouri.....	32,700	South Carolina.....	20,400
Montana.....	10,000	Arkansas.....	22,400
Wisconsin.....	11,200	Mississippi.....	34,400
New Hampshire.....	10,000	Alaska.....	10,000
Minnesota.....	13,000	Hawaii.....	10,000
Florida.....	23,800	Puerto Rico.....	31,000
Kansas.....	10,000	Virgin Islands.....	10,000

¹ \$1,000,000 distributed among States on basis of formula in which following 3 factors were multiplied:

- (1) $\frac{\text{Total public assistance recipients, June 1958}}{\text{Total population, July 1958}} = \text{Recipient rate.}$
- (2) $\frac{\text{Total population, July 1958}}{\text{Total personal income payments, 1955-57}} = \text{Per capita income inverted.}$
- (3) Total population, July 1958—except that (a) no State will receive less than \$10,000, and (b) for Alaska, Puerto Rico, and the Virgin Islands, for which no data were available on personal income payments, the data used for inverted per capita income (factor 2 above) were the same as the average for the United States.
- (4) Guam is excluded from table because public assistance programs are not yet operating.

PREPARED STATEMENT

Senator HILL. Mr. Mitchell, Commissioner of Social Security.

Mr. MITCHELL. On this item, Senator, I have already testified. I would be grateful, though, if I could submit for the record the more extensive statement I prepared in justification for that item.

Senator HILL. We will be glad to have you do that.

(The statement referred to follows:)

STATEMENT OF COMMISSIONER OF SOCIAL SECURITY ON GRANTS FOR SOCIAL SECURITY TRAINING AND STUDIES

The 1956 Social Security Amendments include authority—(1) to make grants to States for the training of State and local public welfare personnel; and (2) finance research studies and demonstration projects in social security.

It is recognized that in addition to providing financial aid, the assistance programs should be directed also toward promoting self-support, self-care, and the strengthening of family life. The training and study amendments were designed to help accomplish these goals.

For 1960, we have requested \$1 million for the training grant program, \$700,000 for the study and demonstration project program, and \$85,000 to administer them for approximately 10 months. This is a total of \$1,785,000. I would like first to discuss the estimate for training grants and then to discuss the estimate for studies and demonstration projects.

TRAINING GRANTS

The \$1 million requested for training grants will go to the States to help them finance the training of persons working in the four public assistance programs. As you know, these programs involve over 5 million needy persons and over \$3 billion of Federal, State, and local funds. At present, only about 20 percent of the 37,000 persons working in the public assistance programs have professional training. Several States have demonstrated that properly trained public welfare staff was able to assist and guide families significantly in the development of individual resources, in assisting and guiding family members to obtain employment, and in an enhanced sense of personal worth.

Social work education (1) equips workers to deal with social, economic, and cultural problems of individuals and of groups; (2) provides an understanding of human growth and behavior; and (3) provides actual practice, under competent supervision, of helping people motivate themselves toward better conditions. This kind of professional education and training is basic to the successful operation and administration of the public assistance programs.

The \$1 million requested for 1960 would provide academic training for 350 field supervisors and county directors and permit approximately 1,000 State and local employees to receive training in seminars of about 2 weeks' duration.

COOPERATIVE STUDIES

One of our responsibilities is to study and make recommendations as to the most effective methods of providing economic security. In recognition of this, the 1956 amendments authorized grants to States, to public and other nonprofit organizations and the making of contracts or jointly financed cooperative arrangements for the conduct of research and demonstration projects in social security.

Research or demonstration projects such as those relating to causes of dependency and methods of eliminating dependency are an important aspect of a constructive social security program in this country. As an illustration, if we could but eliminate from the rolls only a small percentage of the over 5 million persons receiving public assistance, the rewards would be great both in dollar savings and in human values.

With \$700,000 in 1960 for this program, it will be possible to initiate approximately 30 studies. Examples of research or demonstration projects which could be undertaken are: (1) Basic studies in the causes and prevention of dependency; (2) studies on methods of providing medical care and associated services for public assistance and other low income groups; and (3) a benchmark study to establish in more detail than has heretofore been available the characteristics of people now receiving assistance and the incidence of different types of problems and needs among these individuals.

PORTIONS OF ACT

Senator HILL. We will include at this point in the record the pertinent portions of the act authorizing the training of public welfare workers and for cooperative research and demonstration projects.

(The information referred to follows:)

TRAINING GRANTS FOR PUBLIC WELFARE PERSONNEL

SEC. 705. (a) In order to assist in increasing the effectiveness and efficiency of administration of public assistance programs by increasing the number of adequately trained public welfare personnel available for work in public assistance programs, there are hereby authorized to be appropriated for the fiscal year ending June 30, 1958, the sum of \$5,000,000, and for each of the four succeeding fiscal years such sums as the Congress may determine.

(b) From the sums appropriated pursuant to subsection (a), the Secretary shall make allotments to the States on the basis of (1) population, (2) relative need for trained public welfare personnel, particularly for personnel to provide self-support and self-care services, and (3) financial need.

(c) From each State's allotment under subsection (b), the Secretary shall from time to time pay to such State 80 per centum of the total of its expenditures in carrying out the purposes of this section through (1) grants to public

or other nonprofit institutions of higher learning for training personnel employed or preparing for employment in public assistance programs, (2) special courses of study or seminars of short duration conducted for such personnel by experts hired on a temporary basis for the purpose, and (3) establishing and maintaining, directly or through grants to such institutions, fellowships or traineeships for such personnel at such institutions, with such stipends and allowances as may be permitted under regulations of the Secretary.

(d) Payments pursuant to subsection (c) shall be made in advance on the basis of estimates by the Secretary and adjustments may be made in future payments under this section to take account of overpayments or underpayments in amounts previously paid.

(e) The amount of any allotment to a State under subsection (b) for any fiscal year which the State certifies to the Secretary will not be required for carrying out the purposes of this section in such State shall be available for reallotment from time to time, on such dates as the Secretary may fix, to other States which the Secretary determines have need in carrying out such purposes for sums in excess of those previously allotted to them under this section and will be able to use such excess amounts during such fiscal year; such reallotments to be made on the basis provided in subsection (b) for the initial allotments to the States. Any amount so reallotted to a State shall be deemed part of its allotment under such subsection.

COOPERATIVE RESEARCH OR DEMONSTRATION PROJECTS

SEC. 1110. (a) There are hereby authorized to be appropriated for the fiscal year ending June 30, 1957, \$5,000,000 and for each fiscal year thereafter such sums as the Congress may determine for (1) making grants to States and public and other nonprofit organizations and agencies for paying part of the cost of research or demonstration projects such as those relating to the prevention and reduction of dependency, or which will aid in effecting coordination of planning between private and public welfare agencies or which will help improve the administration and effectiveness of programs carried on or assisted under the Social Security Act and programs related thereto, and (2) making contracts or jointly financed cooperative arrangements with States and public and other nonprofit organizations and agencies for the conduct of research or demonstration projects relating to such matters.

(b) No contract or jointly financed cooperative arrangement shall be entered into, and no grant shall be made, under subsection (a), until the Secretary obtains the advice and recommendations of specialists who are competent to evaluate the proposed projects as to soundness of their design, the possibilities of securing productive results, the adequacy of resources to conduct the proposed research or demonstrations, and their relationship to other similar research or demonstrations already completed or in process.

(c) Grants and payments under contracts or cooperative arrangements under subsection (a) may be made either in advance or by way of reimbursement, as may be determined by the Secretary; and shall be made in such installments and on such conditions as the Secretary finds necessary to carry out the purposes of this section.

FUNDS FOR PROFESSIONAL PERSONNEL

Mr. MITCHELL. Also, if there are any questions in the minds of the committee that you would like to clear up, I would be glad to testify further.

Senator HILL. You refer to that item of \$1,785,000 that we addressed ourselves to earlier.

Mr. MITCHELL. Yes, sir.

Senator HILL. Is there any other comment you would like to add to that?

Mr. MITCHELL. Nothing more, except to reiterate how deeply we feel, on the basis of long experience in this field, that we ought to know more about the causes for these very expensive programs than we now know. With that information in hand, we feel that we can do a much more intelligent job at a much lower price. We feel likewise that an increase in the number of staff skilled and trained in

dealing with needy people, staff who can give the advice and help necessary to get them on their financial feet, will be good for the country, good for the people, and will save a lot of money. I am not saying that with the expenditure of \$1,785,000 in 1 year that we are going to come back here and tell you that we have more or less reformed the world. But I do think we are going to be able to come back and tell you that we have learned some very useful things, and we have gotten some very fine programs under way.

Senator HILL. Are there any questions about this?

Senator BIBLE. This is the item that the Budget allowed, but the House of Representatives cut out?

Mr. MITCHELL. That is right.

STATEMENT OF SENATORS HUMPHREY AND M'CARTHY

Senator HILL. Senators Humphrey and McCarthy have requested that their joint statement in support of an appropriation for the training of public welfare workers be inserted in the record. Their statement will be included at this point.

(The statement referred to follows:)

STATEMENT OF SENATOR HUBERT H. HUMPHREY AND SENATOR EUGENE MCCARTHY IN SUPPORT OF APPROPRIATIONS FOR FEDERAL GRANTS TO PUBLIC WELFARE PERSONNEL

Mr. Chairman, the budget requests an appropriation of \$1,785,000 for grants to States to increase the number of adequately trained public welfare personnel. This money would be used to provide fellowships and traineeships, special short term courses of study or seminars to provide opportunities for State and local staffs administering the public assistance programs and for a few teaching grants.

We believe that such a program will enhance the prestige of public assistance workers and will, indeed, enable them to more effectively pursue their occupations as a result of acquiring new knowledge. Officials in this field report there is a shortage of qualified personnel for public welfare work and also report that there is a need to attract recruits and to upgrade present personnel.

Therefore, we urge the committee to favorably report an appropriation of \$1,785,000 or a greater amount for these training and research grants.

COMMUNICATIONS

Senator HILL. The committee has received letters from the National Council of the Churches of Christ in the United States of America, and the Council of Jewish Federations and welfare Funds, Inc., both of New York City, in support of an appropriation for the training of public welfare workers and for research and demonstration projects. These letters will be inserted at this point in the record.

(The letters referred to follow:)

NATIONAL COUNCIL OF THE CHURCHES OF CHRIST IN THE
UNITED STATES OF AMERICA,
DIVISION OF CHRISTIAN LIFE AND WORK,
DEPARTMENT OF SOCIAL WELFARE,
New York, N.Y., May 7, 1959.

Hon. LISTER HILL,
Chairman, Subcommittee on Labor and Public Welfare, Senate Office Building,
Washington, D.C.

DEAR SENATOR HILL: I would appreciate entry of this letter in the record of the hearings in support of the appropriations indicated below.

The Department of Social Welfare of the National Council of Churches, which coordinates the national welfare programs of 40 Protestant and Eastern Orthodox denominations, expressed unanimous support at a regularly called meeting

for the appropriation of \$1,785,000 recommended in the President's budget to carry forward the programs of cooperative social research and training of public assistance personnel authorized by the Social Security Act amendments of 1956. We believe these programs are desirable and necessary to help needy people become self-supporting and self-respecting persons and will help develop their capacities for service to God and their fellow men.

At the same meeting, and by unanimous vote, the Department advocated an increase in the appropriation for child welfare services to the full amount authorized in the Social Security Act amendments of 1958. This position represents an appreciation of the needs of children in the Nation today and the costs of appropriately serving them. We particularly point to the necessity of this additional money if the provision of Federal child welfare funds to urban as well as rural areas is to be achieved. We believe that this increase will serve to encourage the States to increase their own expenditures in providing services in the child welfare programs.

Sincerely yours,

WILLIAM J. VILLAUME,
Executive Director.

COUNCIL OF JEWISH FEDERATIONS AND WELFARE FUNDS, INC.,
New York, N.Y., May 1, 1959.

HON. LISTER HILL,
U.S. Senate, Washington, D.C.

DEAR SENATOR HILL: We understand that the Senate Appropriations Subcommittee, of which you are chairman, is currently reviewing appropriations for the Department of Health, Education, and Welfare. A year ago we sent you the enclosed letter setting forth the strong support of our board of directors for an appropriation to make possible social welfare research and training grants for public welfare personnel. Our past president, Sidney Hollander of Baltimore, also testified in our behalf before your committee on May 13, 1958. A copy of his testimony is also enclosed.

At this time I want to reaffirm our strong support in behalf of appropriations for these purposes. I am informed that the administration has requested \$1 million for training grants, \$700,000 for cooperative research and demonstration studies, and \$85,000 for administration, or a total of \$1,785,000 for the two purposes. I earnestly hope that your subcommittee will recommend appropriation of these sums and that the Senate and the Congress will give final approval to such appropriations. The benefits to be derived will be far greater than the modest expenditures involved.

Sincerely yours,

HERBERT R. ABELES,
President.

APRIL 17, 1958.

Senator LISTER HILL,
*Senate Office Building,
Washington, D.C.*

DEAR SENATOR HILL: As the Senate Appropriations Subcommittee begins its review of appropriations for the Department of Health, Education, and Welfare, I want to share with you the interests of the Council of Jewish Federations and Welfare Funds. You may recall our communication last year in support of appropriations for a program of social welfare research and training. Our council and its local affiliates, serving almost 800 communities in all parts of the country, regretted that last year it was not possible to provide funds to implement these programs which were authorized in 1956.

If the Senate Appropriations Subcommittee plans to hold public hearings on appropriations for the Department of Health, Education, and Welfare, we would appreciate an opportunity to present testimony especially on behalf of the program for social welfare research and training.

Our board of trustees last month again discussed this subject and reaffirmed its conviction that the need for these appropriations has increased rather than decreased with the passage of another year. Our social security program is a major bulwark against the ups and downs in our economy. The Department of Health, Education, and Welfare is responsible for the expenditures of large

sums. We are convinced that increased efficiency can be secured and the effectiveness of our social security program stimulate basic research and training in the field of social security and public assistance.

We are convinced that carefully selected and limited social welfare research can uncover important data about the causes of economic dependency which persist through good times and bad. Such research is an essential first step if we are to find ways to reduce the growing burden of public welfare in the United States. Small and incomplete studies conducted with the inadequate funds of private welfare have already indicated how long-range savings can be anticipated if such research can be extended further.

Pending such research, we believe there is also ample evidence that improvement in the skill and training of social workers administering public welfare programs can do much to raise the efficiency and effectiveness of these operations. The severe shortage of professionally trained social workers is well known. Voluntary philanthropy has carried the major burden of recruiting and training social workers for their important tasks. The growing demand for trained personnel and the increasing cost of professional training of all kinds leads us to the belief that some assistance is required through the Department of Health, Education, and Welfare. A modest appropriation for training of social workers this year will undoubtedly result in significant savings through the more efficient operations of our local and statewide public welfare programs.

On behalf of the board of directors of the Council of Jewish Federations and Welfare Funds and our local affiliates, I wish to urge that your committee give fullest consideration to an appropriation for both social welfare research and training which can be added to the budget of the Department of Health, Education, and Welfare for the coming year.

If there is an opportunity to present testimony, will you let us know.

Sincerely,

HERBERT R. ABELES,
President.

TESTIMONY IN SUPPORT OF AN APPROPRIATION FOR A COOPERATIVE RESEARCH AND DEMONSTRATION PROGRAM IN SOCIAL SECURITY AND AN AMENDMENT ON AN APPROPRIATION FOR TRAINING GRANTS FOR PUBLIC WELFARE PERSONNEL

Submitted on behalf of the Council of Jewish Federations and Welfare Funds, Inc., by Sidney Hollander, May 13, 1958

Mr. Chairman and members of the committee, I am testifying today as a representative of the Council of Jewish Federations and Welfare Funds which is a national association of 213 Jewish federations and welfare funds representing 800 Jewish communities in the United States. These organizations are interested in the health and welfare services of all the Jewish communities and are active in their support and their coordination with the health and welfare services, public and private alike, of the entire community. I am a former president of the Council and an active member of its board of directors. In addition, I am active in other organizations which are engaged in similar work. In particular, I served for 17 years as a member of the Public Welfare Commission of the State of Maryland, and was president of the National Social Welfare Assembly, an association of the 50 to 60 national organizations active in the fields of health and welfare. My testimony today, however, is in my capacity as a member of the board of directors of the Council of Jewish Federations and Welfare Funds.

The Council recommends that the Senate amend the House appropriation bill for the Department of Health, Education, and Welfare to include an appropriation of approximately \$2 million for the fiscal year 1959 to launch the cooperative research and demonstration program authorized in 1956 by section 1110 of the Social Security Act as amended. In addition, Council recommends a similar amendment to provide \$2 million for the fiscal year 1959 to launch the program of grants to States for the training of public welfare personnel which was authorized in 1956 by section 705 of the Social Security Act as amended.

Let me first address myself to the proposal for an amendment on cooperative research or demonstration projects. What is requested here is that the Congress provide the funds which would permit the Department of Health, Education, and Welfare to operate its \$3 billion a year program in the field of public welfare on a businesslike basis. Can you imagine any large corporation operating on an

annual expenditure of better than \$3 billion a year which does not conduct some research into the methods of carrying on their business efficiently and economically? Now-a-days, it goes almost without saying that any efficient, large business requires a continual review of operations, continual research into areas of possible loss or improvement of methods of operation so as to increase the efficiency of the organization, and finally, including the objective of finding new or better ways to transact business or improve service.

The conduct of the \$3 billion a year public welfare business in which the Government is engaged is no less important and requires no less than the fullest use of the tools of research and demonstration in order to make sure that the best ways of carrying on business—welfare or any other—are found.

The Congress has already been very generous in making this principle effective in the field of health. Its annual appropriations for the last several years to the health institutes have been generous and important, and the generosity of the Congress in supporting extended research and demonstration in the fields of cancer, heart, mental health, etc., is to be commended as a fine recognition of the necessity for continually improving the health of the Nation. Well, the public welfare programs are no less important. Their programs too require continuous research and continuous improvement in order to assure the best welfare of the Nation.

I do not wish to imply that there has been absolutely no research in this field. There has been some. Some private social agencies, some universities and some State welfare departments have conducted experiments in this field and some of these have proved of very real value. However, the great bulk of the money expended for welfare comes from the Federal and State governments and the amount of research which can be done with funds from private sources is not at all adequate for the job to be done. The 1956 act provides that grants may be made for such projects as—

- (1) Relating to the prevention or reduction of dependency, or
- (2) Which will aid in effectuating coordination of planning between private and public welfare agencies, or
- (3) Which will help improve the administration and effectiveness of programs carried on or assisted under the Social Security Act and programs related thereto.

It certainly makes sense to look into ways of preventing or reducing dependency and many of us believe it is possible, through careful research, to prevent or reduce dependency in, let's say, the aid to dependent children load. The ADC load presents a very important opportunity for social research.

SALARIES AND EXPENSES, OFFICE OF THE COMMISSIONER

APPROPRIATION ESTIMATE

“For expenses necessary for the Office of the Commissioner of Social Security, **[\$314,000]** \$337,000, together with not to exceed **[\$246,000]** \$276,000 to be transferred from the Federal old-age and survivors insurance trust fund.”

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$314, 000	\$337, 000	\$337, 000
Transfer from OASI trust fund.....	246, 000	276, 000	276, 000
Total.....	560, 000	613, 000	613, 000
Supplemental:			
Appropriation estimate.....	28, 000		
Transfer from OASI Trust Fund.....	22, 500		
Total.....	50, 500		
Total available for obligation.....	610, 500	613, 000	613, 000

Obligations by activity

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Direction and coordination of the social se- curity program.....	30	\$289, 529	30	\$287, 712	30	\$287, 712
2. Appraisal and development of the social se- curity program.....	36	320, 971	36	325, 288	36	325, 288
1959 program obligated in 1958.....		-500				
Total obligations.....	66	610, 000	66	613, 000	66	613, 000
1959 appropriation available in 1958.....		500				
Total.....	66	610, 500	66	613, 000	66	613, 000

Obligations by objects

Description	1959 estimate		1960 estimate		House allowance	
Total number of permanent positions.....		66		66		66
Average number of all positions.....		65		64		64
Number of employees at end of year.....		66		66		66
Average GS grade and salary.....	9. 7	\$7, 982	9. 7	\$8, 076	9. 7	\$8, 076
01 Personal services.....		\$528, 811		\$530, 940		\$530, 940
02 Travel.....		10, 400		7, 500		7, 500
04 Communication services.....		10, 000		10, 000		10, 000
06 Printing and reproduction.....		11, 175		14, 309		14, 309
07 Other contractual services.....		8, 400		8, 400		8, 400
08 Supplies and materials.....		6, 300		6, 300		6, 300
09 Equipment.....		1, 000		1, 000		1, 000
11 Grants, subsidies, and contributions.....		34, 374		34, 511		34, 511
15 Taxes and assessments.....		40		40		40
1959 program obligated in 1958.....		-500				
Total obligations.....		610, 000		613, 000		613, 000

Summary of changes

	Positions	Amount
1959:		
Actual appropriation.....		\$314, 000
Transfer from OASI trust fund.....		246, 000
Total.....		560, 000
Supplemental:		
Appropriation.....		28, 000
Transfer from OASI trust fund.....		22, 500
Total.....		50, 500
Grand total.....	66	610, 500
Deduct nonrecurring travel costs.....		2, 900
Revised base.....	66	607, 600
1960 request:		
Appropriation.....		337, 000
Transfer from OASI trust fund.....		276, 000
Total.....		613, 000
Change requested.....		+5, 400

Summary of changes—Continued

	1960 budget estimate	1960 House allowance
INCREASES		
For mandatory items: Extra day of pay (261 days in 1959 and 262 days in 1960)	\$2, 266	\$2, 266
For program items: Additional printing funds related to revisions in publications resulting from 1958 amendments to Social Security Act	3, 134	3, 134
Change requested	5, 400	5, 400

SALARIES AND EXPENSES

Senator HILL. Your next item, Mr. Commissioner, is on your salaries and expenses.

Mr. MITCHELL. Yes, sir.

Senator HILL. We would like to have you address yourself to that.

Mr. MITCHELL. While I have been coming to this committee for many years as the Deputy Commissioner, this is my first experience as Commissioner. I am succeeding Mr. Charles Schottland, whom I thoroughly believe merited and enjoyed the confidence of this committee. I sincerely am hopeful that our operations and my personal conduct will be such as to merit the same confidence that I think Mr. Schottland enjoyed.

With respect to the salaries and expenses of the Office of the Commissioner, again I am anxious to conserve the time of the committee, so I request permission to file a statement. I also will be glad to answer any questions.

(The statement referred to follows:)

STATEMENT OF COMMISSIONER OF SOCIAL SECURITY ON SALARIES AND EXPENSES,
OFFICE OF THE COMMISSIONER OF SOCIAL SECURITY

The Social Security Administration is composed of four program bureaus—the Bureau of Old-Age and Survivors Insurance, the Bureau of Public Assistance, the Children's Bureau, and the Bureau of Federal Credit Unions.

The Commissioner of Social Security is responsible to the Secretary for directing, supervising, and coordinating the operations of these four program bureaus. In addition, the Commissioner is responsible for supervising the Office of the Appeals Council which makes final administrative decisions on disputed old-age and survivors insurance and disability claims and for directing the Office of the Actuary. The Commissioner serves as secretary to the board of trustees of the old-age and survivors insurance trust fund and the Federal disability insurance trust fund. In 1959 and 1960, the Commissioner will also serve as Chairman of the Advisory Council on Public Assistance established by the 1958 amendments to the Social Security Act.

MAJOR AREAS OF RESPONSIBILITY

In general, the Commissioner's Office has four major areas of responsibility:

1. Overall supervision of the programs of the Social Security Administration and its bureaus. The functions of the bureaus encompass direct program administration such as the Bureau of Old-Age and Survivors Insurance and the Bureau of Federal Credit Unions, as well as grant-in-aid administration of the public assistance and maternal and child welfare programs with their inherent problems of Federal-State relations.

2. Overall planning with relation to the problem of economic security of the American people.

3. Broad planning in the welfare area.

4. Compiling, studying, and analyzing information in areas pertaining to social security so that current facts on items such as medical care cost, public and

private assistance, and problems of the aging can be related to our present programs and can be used to develop long-range planning for social security in the United States.

1960 BUDGET REQUEST

No increase in positions is requested for 1960. The budget request is \$613,000. Of this amount, \$337,000 is requested from general funds; the remainder, \$276,000 to be derived from the Federal old-age and survivors insurance trust fund. The total request for 1960 is an increase of \$2,500 over funds available for 1959. This increase is to finance the 1 additional day's pay required in 1960.

1959 AND 1960 WORK EMPHASIS

For fiscal year 1958, Congress appropriated funds to increase the staff of the Office of the Commissioner from 48 to 66 positions. With this increased staff, we have strengthened our work in such areas as family life, services for the family, and problems of the aging. We are also now better equipped to compile research material and make studies to more adequately develop both the short- and the long-range planning for social security. In general, we are now in a better position to handle the many day-to-day policy and program problems which arise.

During 1959 and 1960, the Office of the Commission will, of necessity, devote attention to the implementation of the 1958 amendments to the Social Security Act. Particular attention must be given by the Commissioner and his staff to two Advisory Councils which are required by law to report on their findings during 1960. These are (1) an Advisory Council on Public Assistance to study the financing of our public assistance programs, and (2) an Advisory Council on Child Welfare Services to evaluate recent changes in the child welfare program with particular reference to the "rurality" factor.

I will be pleased to answer any questions you may have on our budget estimate for 1960.

APPROPRIATION ESTIMATE

Our appropriation estimate next year is identical to that for this year except for a minor item of \$2,500 for an extra day's pay.

Senator HILL. My figure shows \$5,000.

Mr. WYNKOOP. That is the net change after taking into account a nonrecurring item in 1959.

Senator HILL. That is in addition to the extra day?

Mr. WYNKOOP. Yes, sir.

Mr. MITCHELL. Our organization as we propose it for next year is identical to that which we have this year. We got a few extra positions last fiscal year which we have used, I think, quite advantageously. So I have nothing to testify with respect to increases or decreases. But I will be very happy to answer any questions.

Senator HILL. You think you will be able to carry on the operation of the Office.

Mr. MITCHELL. Yes, sir.

Senator HILL. In a satisfactory manner?

Mr. MITCHELL. Yes, sir.

Senator HILL. With these funds?

Mr. MITCHELL. Yes, sir.

Senator HILL. Are there any questions, gentlemen?

Senator BYRD. I want to compliment Mr. Mitchell on requesting no additional positions for 1960.

Mr. MITCHELL. That may put me in a bad spot for next year.

Senator HILL. You succeeded a very efficient and splendid man in Mr. Schottland, and I am sure you will carry on with his efficiency and the splendid manner in which he carried on.

Mr. MITCHELL. It was a great pleasure and satisfaction to work with him, Senator.

SALARIES AND EXPENSES, OFFICE OF THE SECRETARY

STATEMENT OF JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“For expenses necessary for the Office of the Secretary, **[\$1,809,000]** \$2,151,000, together with not to exceed **[\$263,000]** \$318,000 to be transferred from the Federal old-age and survivors insurance trust fund.”

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation.....	\$1,809,000	\$2,151,000	\$2,061,000
Advance from OASI trust fund.....	263,000	318,000	302,500
Supplemental:			
Appropriation.....	162,000		
Advance from OASI trust fund.....	24,000		
Total amount available for obligation.....	2,258,000	2,469,000	2,363,500

	1959 appropriations		1960 budget to Congress		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
I. EXECUTIVE DIRECTION AND PROGRAM COORDINATION						
1. Office of Secretary and Under Secretary.....	19	\$223,491	20	\$236,641	20	\$236,641
2. Office of Internal Security.....	12	102,269	15	119,269	13	108,219
3. Office of Assistant Secretary.....	11	117,209	11	117,609	11	117,609
4. Office of Assistant Secretary (Legislation).....	10	97,581	10	97,931	10	97,931
5. Special Staff on Aging.....	12	111,106	12	111,466	12	111,466
6. Office of Assistant to the Secretary (for Pro- gram Analysis).....	11	109,985	17	164,385	13	130,375
Subtotal, activity I.....	75	761,641	85	847,301	79	802,241
II. OFFICE OF PUBLICATIONS AND REPORTS....	13	128,835	15	145,135	14	139,535
III. ADMINISTRATIVE AND FINANCIAL MANAGE- MENT						
1. Office of Director of Administration.....	4	44,397	5	48,797	5	48,797
2. Office of Financial Management.....	43	338,206	45	364,206	44	353,306
3. Office of Management Policy.....	18	155,826	19	167,779	18	156,376
4. Division of Personnel Management.....	28	234,482	32	268,882	30	255,279
5. Division of General Services.....	99	594,613	100	626,900	100	607,966
Subtotal, activity III.....	192	1,367,524	201	1,476,564	197	1,421,724
Total obligations, all activities.....	280	2,258,000	301	2,469,000	290	2,363,500

Obligations by activities

Description	1959 appropria- tion		1960 budget to Congress		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
1. Executive direction and program coordina- tion.....	75	\$761,641	85	\$847,301	79	\$802,241
2. Publications and reports.....	13	128,835	15	145,135	14	139,535
3. Administrative and financial management....	192	1,367,524	201	1,476,564	197	1,421,724
Total obligations.....	280	2,258,000	301	2,469,000	290	2,363,500

Obligations by objects

Object classification	1959 appro- piation	1960 budget to Congress	1960 House allowance
Total number of permanent positions.....	280	301	290
Full time equivalent of all other positions.....	2	2	2
Average number of all employees.....	269	288	279
Number of employees at end of year.....	273	294	283
01 Personal services.....	\$1,918,909	\$2,079,818	\$2,005,838
02 Travel.....	33,785	47,635	38,835
03 Transportation of things.....	420	420	420
04 Communication services.....	41,810	44,054	38,340
05 Rents and utility services.....	100	100	100
06 Printing and reproduction.....	50,530	59,715	54,915
07 Other contractual services.....	41,751	43,091	42,126
08 Supplies and materials.....	27,210	29,900	29,060
09 Equipment.....	23,000	33,323	27,973
11 Grants, subsidies, and contributions: Contributions to the retirement fund.....	118,165	128,399	123,348
13 Refunds, awards, and indemnities.....	1,145	1,145	1,145
15 Taxes and assessments.....	1,175	1,400	1,400
Total obligations.....	2,258,000	2,469,000	2,363,500

Summary of changes

	Positions	Amount
1959 actual:		
Appropriation.....	280	\$1,809,000
Transfer from OASI.....		263,000
1959 supplemental:		
Appropriation.....		162,000
Transfer from OASI.....		24,000
Total.....	280	2,258,000
1960 appropriation request:		
Appropriation.....	301	2,151,100
Transfer from OASI.....		318,000
Total.....	301	2,469,000
Net change requested.....	+21	+211,000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
INCREASES				
For mandatory items: Extra days pay (261 days in 1959 and 262 days in 1960).....		\$7,431		\$7,431
For program items:				
1. To strengthen Office of Secretary and Under Secretary by provision of an additional assistant to the Under Secretary because of workload generated by enactment of recent legislation and \$1,500 for additional consultant services.....	1	12,450	1	12,450
2. For the security office 3 positions are requested to handle the increased security workload due to expanding activities in the Department.....	3	16,650	1	5,600
3. To strengthen program analysis activity 3 professional positions and 3 clerks are needed. There is a need for a comprehensive study of recent social trends and of emerging problems and long-range program needs.....	6	54,010	2	20,000
4. For analysis of Department publications and to assist operating agencies in planning and coordinating their publications activities.....	2	15,900	1	10,300
5. To strengthen administrative and financial management.....	9	96,559	5	49,719
6. Planned reduction in payment from working capital fund.....		8,000		
Total change requested.....	21	211,000	10	105,500

New positions requested, fiscal year 1960

	Grade	Annual salary
Executive direction and program coordination:		
Assistant to the Under Secretary.....	GS-15.....	\$12,771
Social science economist.....	GS-15.....	12,771
Analytical statistician.....	GS-13.....	9,901
Social science analyst.....	GS-13.....	9,901
Security specialist.....	GS-11.....	7,030
Assistant liaison officer.....	GS-7.....	4,992
Statistical clerk.....	GS-7.....	4,992
(2) Secretary.....	GS-5.....	8,112
File clerk.....	GS-3.....	3,515
Subtotal (10).....		73,985
Office publications and reports:		
Publications planner and reviewer.....	GS-14.....	11,357
Secretary.....	GS-6.....	4,493
Subtotal (2).....		15,850
Administrative and financial management:		
Chief, personnel operations.....	GS-15.....	12,771
Deputy director of financial management.....	GS-15.....	12,771
Management analyst.....	GS-14.....	11,357
Auditor.....	GS-13.....	9,901
Assistant supply officer.....	GS-12.....	8,341
Personnel methods analyst.....	GS-12.....	8,341
Promotion clerk.....	GS-5.....	4,056
Typist-statistical clerk.....	GS-4.....	3,765
Clerk-stenographer.....	GS-4.....	3,765
Subtotal (9).....		75,068
Total new positions (21).....		164,903

EFFECT OF HOUSE ACTION

Activity I. Executive direction and program coordination

The House allowed an increase of \$2,550 to cover the mandatory items and \$38,050 for four new positions, an assistant to the Under Secretary, a security clerk to accelerate the clearances of Public Health Service Commissioned Corp officers and a statistician and clerk in the program analysis field.

It disallowed \$45,060 for six positions. Two of these are for the security office and were requested because of the heavy increase in security workload due to the general expansion in the Department's activities and also to the increased activity and participation in international conferences, foreign travel and East-West exchange program; all of which resulted in expanded activity in sensitive areas. The other four positions disallowed were for the program analysis office and are needed primarily in connection with a study of current problems of importance to the Secretary and of emerging problems and longer range program needs.

Activity II. Office of publications and reports

The House allowed an increase of \$400 to cover the mandatory items and \$10,300 for one new professional position to assist the operating agencies in planning and coordinating their publications activities.

It disallowed \$5,600 for the clerical assistant to the professional approved above and will serve to slow the progress in this undertaking.

Activity III. Administrative and financial management

The House allowed an increase of \$4,481 for mandatory items and \$49,719 for five new positions which will provide for a deputy director of financial management, an assistant supply officer, a chief of personnel operations development and two secretaries.

It disallowed \$54,840 for four positions. One of these positions, an auditor, is needed if the internal audit responsibilities are to be carried out on a 2-year cycle as is now planned. The requested management analyst was also disallowed and will not enable this office to conduct on-the-spot appraisals of management progress and problems in the field establishments, an area which has been neglected to date. In the personnel field, the reduction of two positions will

impede our efforts in the operation of the new Federal promotion program required by the Civil Service Commission and also in the recruitment of exceptional young college graduates.

PREPARED STATEMENT

Senator HILL. Mr. Kelly, are you going to address yourself to the next item?

Mr. KELLY. Yes, sir, if I may. I would like to file on behalf of the Secretary his statement on the salaries and expenses, Office of the Secretary.

(The statement referred to follows:)

STATEMENT OF SECRETARY OF HEALTH, EDUCATION, AND WELFARE, ON SALARIES AND EXPENSES, OFFICE OF THE SECRETARY

Mr. Chairman and members of the committee, when I appeared before you at the opening of these hearings, I indicated that I would return later to discuss the requirements of the Office of the Secretary and be available to discuss any further questions your committee may have. This is a brief statement on the needs of the Office of the Secretary.

I am told by those who have lived with the Department for a number of years that the demands upon the Office of the Secretary have been mounting at a very rapid pace. When the Federal Security Agency was elevated to full departmental status, there was an enormous increase in interest on the part of the press and the public in the great range of activities administered by the Department. In the 6 years since it acquired departmental status, not only has Congress added numerous new responsibilities to the Department of Health, Education, and Welfare, but the degree of public interest and demand for information has continued to rise rapidly. The number of congressional bills affecting the work of the Department goes up with each session, and, of course, the Department is asked to develop and state its position on each of these bills. In the 85th Congress we were asked to report on 1,240 bills. Undoubtedly the number will be greater in the 86th Congress.

Although we have a somewhat larger staff than we had 6 years ago—and I am grateful to this committee for the support it has given to necessary increases in the Office of the Secretary—I have concluded that some additions are needed if the Department is to deal effectively with the problems that have been assigned to it. In preparing the budget which is before you, we have asked for only the most essential increases, but those which we have asked for are genuinely important to the successful discharge of our responsibilities.

As you are aware, the Office of the Secretary has four regular appropriations: "Salaries and expenses, Office of the Secretary," "Salaries and expenses, Office of the General Counsel," "Salaries and expenses, Office of Field Administration," and "Surplus property utilization." This year we also have a fifth, "White House Conference on Aging." I wish to comment specifically about the requirements for the appropriation "Salaries and expenses, Office of the Secretary." Miss Adkins will discuss the White House Conference on Aging in greater detail, and Mr. Banta and Mr. Lund will discuss the other three appropriations in as much detail as the committee may wish.

The budget for "Salaries and expenses, Office of the Secretary," is grouped under three main headings: (1) Executive direction and program coordination, with 75 current positions, (2) the Office of Publications and Reports, with 13 current positions, and (3) administrative and financial management, with 192 current positions. For fiscal year 1960 we are requesting an increase of 10 positions for executive direction and program coordination, an increase of 2 positions for the Office of Publications and Reports, and an increase of 9 positions for administrative and financial management.

Executive direction and program coordination

Ten new positions are needed to carry out this activity: one in the Office of the Under Secretary, six in program analysis, and three in internal security.

The load upon the Office of the Under Secretary has been steadily increasing. A second assistant is needed to aid the Under Secretary, particularly as the need for interdepartmental and intradepartmental coordination increases.

To assist the Secretary in the area of program analysis, three additional professional staff members with three stenographic and clerical assistants are required. It is not intended that they should undertake by themselves all of the program analysis work needed by the Office of the Secretary. Rather, it is intended that the maximum amount of such work shall be done by the various operating agencies. Experience has indicated, however, that in a multipurpose department like ours, the number of problems which cut across operating agency lines is so great as to require competent program analysts in the Office of the Secretary who can separate the various segments of complex problems and, after careful analysis, fit the parts together into well-organized staff papers. We are extremely short on such staff personnel at the present time. It is also the expectation that these additional personnel will be able to assist the operating agencies in improving certain basic statistical data.

New programs in the Department including increased activity and participation in international conferences, foreign travel and east-west exchange program have increased the security workload which necessitates the request for three positions. A large backlog now exists of preappointment checks on Public Health Service Commissioned Officers. This may prove to be a serious bottleneck in recruitment plans of the PHS. One of the three new positions is requested for these preappointment checks.

Although no increase is requested in this appropriation for the Special Staff on Aging, I wish to comment particularly on the importance which I attach to this function and on certain steps which we have taken and are taking to strengthen our work in this field. We have moved the Special Staff on Aging so that it reports directly to and works very closely with the Under Secretary. The work of the special staff will be closely coordinated with the White House Conference on Aging. Were it not for the separate appropriation for the White House Conference, and the extensive activities supported by it, we would undoubtedly be asking for some increase in the size of the special staff in order to meet the steadily growing needs for national leadership, information, and technical assistance more adequately. Since your committee will have a separate discussion of the appropriation for the White House Conference on Aging and the activities supported by it, I shall not go into the degree of detail in this statement in respect to the Special Staff on Aging which I otherwise would.

Publications and reports

As I mentioned, the increased demand for information about the Department of Health, Education, and Welfare and its operating agencies is very marked. As a result, the Office of Publications and Reports has been unable to perform an essential responsibility which it has had assigned to it for a number of years. That is the function of working closely with the operating agencies to assist them in seeing that their publications functions are performed effectively and economically. The Department produces many publications each year. There is need to help the operating agencies produce publications which are, on the one hand, of good quality and, are, on the other, economically designed, published in suitable but not excessive quantities and otherwise meet the standards of prudent management. An additional professional staff member and a stenographer are needed for this purpose within the Office of Publications and Reports.

Administrative and financial management

The workload upon the Office of Administration is very heavy. Six additional professional positions and three stenographic and clerical are essential to carry the responsibilities assigned to that Office, the necessity for which I shall explain briefly.

A Deputy Director of Financial Management is urgently needed. As you know, the Director of Financial Management serves as departmental budget officer. This extremely responsible position is so demanding upon his time on a year-round basis that he is unable to carry out his duties adequately without the aid of a highly qualified assistant—a deputy—who would relieve the Director of much of the supervisory load. I regard this as one of the most urgently needed additional positions within the Department. An additional auditor is also needed to maintain our internal audits on a 2-year cycle.

During the past year the burden upon our Division of Personnel Management has also become greater than it is staffed to handle. The operating agencies of the Department need more technical assistance to handle their personnel operations effectively. Our capacity to provide such help is extremely limited. We are urgently in need of one-top-level personnel man who can work with the

operating agencies in administering the new training law, improving recruitment, improving organization of personnel activities and personnel procedures, adapting personnel programs to the needs of scientific organizations, and assuring that the new promotion program promulgated by the Civil Service Commission is properly carried out. The new recruitment program has a very meritorious objective and one which we have sought to work toward in the past. The standards of performance which the Civil Service Commission seeks to have us achieve, however, will impose a heavier burden on the Office of Personnel Management than it is equipped to handle. The promotion program alone requires one additional professional position. Two clerical positions are likewise necessary.

The Management Policy Office has been unable to respond promptly to a number of requests for surveys and to undertake certain other useful management projects. An additional management analyst is requested. This position will also conduct on-the-spot appraisals of management progress and problems in our extensive field establishments.

A substantial part of the Office of Administration is engaged in the provision of essential services not only to the Office of the Secretary, but to the headquarters staff of all the operating agencies. This includes central space planning and allocation, central library services, central mail and messenger service and other central services. We also have approximately 130 people who provide duplicating, tabulating, and central supply services to the operating agencies on the basis of purchased supplies and services, using a working capital fund. These are essential housekeeping services which are, I believe, efficiently run. In only one of the numerous parts of these administrative services are we asking for an increase. This is for an assistant supply officer to help us to cope with our numerous and often difficult procurement problems.

A stenographer-typist is needed for the staff assistant to the Director of Administration, who currently has none.

In conclusion, Mr. Chairman, and members of the committee, I should like to say that I believe that these recommended increases are essential to the effective operation of the Office of the Secretary.

I shall be happy to try to answer any questions you may have. Thank you for the opportunity to present this statement.

EFFECT OF HOUSE ACTION

The House of Representatives allowed for the Office of the Secretary a total of \$2,363,500, a reduction of \$105,500 from the estimate and an increase of \$105,500 over funds available for 1959. The allowance provides in addition to the mandatory items, for 10 additional positions.

Four of these are for executive direction and program coordination, one for publications activity and five for administrative and financial management. However, the action of the House had the effect of disallowing 11 positions in the following areas of activity:

Activity I. Executive direction and program coordination

The House allowed an increase of \$2,550 to cover the mandatory items and \$38,050 for four new positions, an assistant to the Under Secretary, a security clerk to accelerate the clearances of Public Health Service Commissioned Corp officers and a statistician and clerk in the program analysis field.

It disallowed \$45,060 for six positions. Two of these are for the security office and were requested because of the heavy increase in security workload due to the general expansion in the Department's activities and also to the increased activity and participation in international conferences, foreign travel and east-west exchange program: all of which resulted in expanded activity in sensitive areas. The other four positions disallowed were for the Program Analysis Office and are needed primarily in connection with a study of current problems of importance to the Secretary and of emerging problems and longer range program needs.

Activity II. Office of Publications and Reports

The House allowed an increase of \$400 to cover the mandatory items and \$10,300 for one new professional position to assist the operating agencies in planning and coordinating their publications activities.

It disallowed \$5,600 for the clerical assistant to the professional approved above and will serve to slow the progress in this undertaking.

Activity III. Administrative and financial management

The House allowed an increase of \$4,481 for mandatory items and \$49,719 for five new positions which will provide for a Deputy Director of Financial Management, an assistant supply officer, a Chief of Personnel Operations Development and two secretaries.

It disallowed \$54,840 for four positions. One of these positions, an auditor, is needed if the internal audit responsibilities are to be carried out on a 2-year cycle as is now planned. The requested management analyst was also disallowed and will not enable this office to conduct on-the-spot appraisals of management progress and problems in the field establishments, an area which has been neglected to date. In the personnel field, the reduction of two positions will impede our efforts in the operation of the new Federal promotion program required by the Civil Service Commission and also in the recruitment of exceptional young college graduates.

I respectfully request that the 11 positions disallowed be restored.

HOUSE ALLOWANCE

Mr. KELLY. I will just give you the effect of the House action. It allowed a total of \$2,363,500, which was a reduction of \$105,500 from the estimate and an increase of \$105,500 over the funds available for 1959. The allowance provides, in addition to the mandatory items, for 10 additional positions. Four of these are for executive direction and program coordination, one for publication activities, and five for administrative and financial management.

However, the action of the House had the effect of disallowing 11 positions in the following areas of activity. Under executive direction and program coordination, they disallowed six positions. Two of these were for the security office which were requested because of the heavy increase in security workload due to general expansion of the Department's activities and also increased activity and participation in international conferences, foreign travel and east-west exchange programs. The other four positions disallowed were in the Program Analysis Office and are needed primarily in connection with a study of current problems of importance to the Secretary, and of emerging and long-range problems and program needs. Also disallowed was \$5,600 for a clerical assistant to an additional professional position in the Office of Publications and Reports, where we have a tremendous task of editing and clearing the total publications program of the Department. Under administrative and financial activities they disallowed four positions. One was an internal auditor needed in an effort to get our internal audit program on a 2-year cycle as planned.

BACKLOG OF WORK

Senator HILL. Are you behind now?

Mr. KELLY. Yes, sir; we are. We are unable to complete the internal audits on a 2-year cycle.

Senator HILL. Because you don't have the personnel?

Mr. KELLY. One additional professional position, we believe, will accomplish that. They disallowed one requested management analyst, whom we had hoped to be able to use for on-the-spot appraisals of our management progress and problems in the field establishments. You know we are very far flung as an organization.

In the personnel field, they reduced two positions which we believe will adversely affect our operation of the new Federal promotion program, and our program of recruiting and training exceptional young

college graduates. The Secretary has asked me to ask the committee if they would not reconsider the House action and restore the reduction of \$105,500.

Senator HILL. You don't think it would cause any inflation to restore these items?

Mr. KELLY. It was in the budget request. I would like to say that in the 5 years I have been with the Department, we have increased the total Department organization from 35,000 to over 60,000 people, and the Office of the Secretary has been increased from 264 positions to 280. I can testify from personal observation that it is an overworked organization, and it has areas that are not being covered as well as I think you would like to have them covered.

Senator HILL. You mean you can't carry on the work adequately without this additional personnel?

Mr. KELLY. There are tremendous areas of coordination and inter-relationship of these various operating agencies of the Department that are not being as effectively coordinated as I think you would like to have them.

Senator HILL. Are there any questions, gentlemen?

Senator BIBLE. No questions, Mr. Chairman.

Senator HILL. Thank you very much.

SALARIES AND EXPENSES, OFFICE OF FIELD ADMINISTRATION

STATEMENT OF CHESTER B. LUND, DIRECTOR, OFFICE OF FIELD ADMINISTRATION, ACCOMPANIED BY JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For expenses necessary for the Office of Field Administration, **[\$2,358,000]** \$2,735,000, together with not to exceed **[\$702,000]** \$926,000 to be transferred from the Federal old-age and survivors insurance trust fund.

"**[The limitation under this head in the Departments of Labor, and Health, Education, and Welfare Appropriation Act, 1959, on the amount available for transfer from the Federal old-age and survivors insurance trust fund, is increased by \$18,000.]**"

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation or estimate.....	\$2, 358, 000	\$2, 735, 000	\$2, 735, 000
OASI transfer.....	720, 000	926, 000	926, 000
Supplementals:			
Appropriation.....	199, 000		
OASI transfer.....	151, 200		
Advances and reimbursements:			
SMS working fund (Department of Labor).....	62, 300	62, 500	62, 500
SMS working fund (OCDM).....	57, 000	135, 000	135, 000
Total available for obligation.....	3, 547, 500	3, 858, 500	3, 858, 500

Obligations by activities

Activity	1959 appropriation		1960 budget estimate		1960 House allowance	
	Position	Amount	Position	Amount	Position	Amount
Field Administration.....	323	\$1,911,450	326	\$2,020,450	326	\$2,020,450
Division of Grant-in-Aid Audits.....	152	1,298,500	163	1,415,000	163	1,415,000
Division of State Merit Systems.....	45	337,550	45	423,050	45	423,050
Total obligations.....	520	3,547,500	534	3,858,500	534	3,858,500
Less: Working funds for State merit systems services:						
From Department of Labor.....	7	62,300	7	62,500	7	62,500
From OCDM.....	12	57,000	12	135,000	12	135,000
Adjusted obligations.....	501	3,428,200	515	3,661,000	515	3,661,000

Obligations by objects

Object classification	1959 appropriation	1960 budget estimate	1960 House allowance
SUMMARY OF PERSONAL SERVICES			
Total number of permanent positions.....	520	534	534
Full time equivalent of all other positions.....	1	4	4
Average number of all employees.....	477	515	515
Number of employees at end of year.....	495	514	514
01 Personal services.....	\$2,900,383	\$3,145,233	\$3,145,233
02 Travel.....	189,840	215,400	215,400
03 Transportation of things.....	7,725	7,925	7,925
04 Communication services.....	121,570	126,500	126,500
05 Rents and utilities.....	1,000	3,600	3,600
06 Printing and reproduction.....	11,810	11,810	11,810
07 Other contractual services.....	40,840	44,751	44,751
08 Supplies and materials.....	68,310	92,330	92,330
09 Equipment.....	20,220	9,840	9,840
11 Grants, subsidies, and contributions:			
Contributions to retirement fund.....	183,591	197,945	197,945
13 Refunds, awards, and indemnities.....	1,000	1,000	1,000
15 Taxes and assessments.....	1,211	2,166	2,166
Total obligations.....	3,547,500	3,858,500	3,858,500
Less: Working funds for State merit systems service:			
From Department of Labor.....	62,300	62,500	62,500
From OCDM.....	57,000	135,000	135,000
Adjusted obligations.....	3,428,200	3,661,000	3,661,000

Summary of changes

	Positions	Amount	Positions	Amount
1959 actual appropriation.....	473	\$2,358,000		
1959 OASI transfer.....		720,000		
1959 supplemental appropriation.....		199,000		
1959 supplemental OASI transfer.....	28	151,200		
1959 working fund (Department of Labor).....	(7)	(62,300)		
1959 working fund (Office of Civilian and Defense Mobilization).....	(12)	(57,000)		
Total appropriation.....			501	\$3,428,200
Deduct nonrecurring costs:				
Equipment.....		9,980		
Overtime costs due to OASI expansion.....		18,000		-27,980
Revised 1959 base.....			501	3,400,220
1960 appropriation request:				
Appropriation.....	515	2,735,000		
OASI transfer.....		926,000		
Working fund (Department of Labor).....	(7)	(62,500)		
Working fund (Office of Civilian and Defense Mobilization).....	(12)	(135,000)	515	3,661,000
Net change requested.....			+14	+260,780

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
INCREASES				
For mandatory items:				
Annualization of 36 new positions authorized in 1959.....		\$62,080		\$62,080
Annualization of pay increase cost in 1959.....		14,000		14,000
Extra days pay (261 days in 1959 and 262 days in 1960).....		10,810		10,810
Communications and supply charges to be incurred for positions authorized operating agencies in 1959.....		6,830		6,830
Subtotal.....		93,720		93,720
For program items:				
3 new positions to strengthen field management activities (2 departmental, 1 regional).....	3	20,680	3	20,680
Temporary clerical assistance in field management.....		11,600		11,600
11 new grant-in-aid auditors for workload resulting from new legislation.....	11	82,335	11	82,335
Reclassification of 30 assistant auditors from GS-9 to GS-11.....		21,450		21,450
Supplies—increase per employee rate from \$25 to \$35 (except Bureau of Federal Credit Unions and temporary Appeals Council staff which are based at \$20).....		19,095		19,095
Repairs of office machines located in regional offices.....		3,100		3,100
Reduction lapse rate from 5 percent to 4.5 percent.....		7,300		7,300
Travel for State merit systems due to increased costs and additional visits to State agencies.....		1,500		1,500
Total change requested.....	14	260,780	14	260,780

New positions requested

	Grade	Annual salary
Field administration:		
Staff assistant.....	GS-13.....	\$9,901
Clerk-stenographer.....	GS-4.....	3,765
Secretary.....	GS-5.....	4,056
Total (3).....		17,722
Division of Grant-in-Aid Audits:		
Auditors (11).....	GS-9.....	65,890
Total new positions—all activities (14).....		83,612

PREPARED STATEMENT

Senator HILL. Mr. Lund, will you come forward.

Mr. LUND. Thank you, sir.

Senator HILL. We would be glad to have you address yourself to this item.

Mr. LUND. I would be very glad to do whatever is your pleasure. I have a very short opening statement, which I can present or insert in the record.

Senator HILL. I believe the House allowed you the budget estimate.

Mr. LUND. The House allowed the total budget estimate.

Senator HILL. Suppose you put your statement in the record and then summarize it for us, if that is agreeable.

Mr. LUND. Yes.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, OFFICE OF FIELD ADMINISTRATION ON SALARIES AND EXPENSES, OFFICE OF FIELD ADMINISTRATION

Mr. Chairman and members of the committee, I should like to describe briefly the 1960 financial requirements and to highlight accomplishments and objectives of the Office of Field Administration.

SUMMARY OF ESTIMATE

The 1960 budget request totals \$3,661,000 and 515 positions or a total increase of \$232,800 and 14 positions over 1959. Of the total request, \$2,735,000 would be a direct appropriation and \$926,000 an authorization from the Federal OASI trust fund. The total increase is primarily for 14 new positions (including 11 grant-in-aid auditors), annualization of costs related to new positions authorized in 1959 and reclassification of assistant auditors-in-charge of States.

RESPONSIBILITIES

Field Administration, grant-in-aid audits, and State merit systems activities are financed by this appropriation. The Field Administration activity includes the operation of nine regional offices consisting of regional directors and their immediate staffs plus business management sections which provide necessary services to operating agency staffs located in or administered through the regional offices. The grant-in-aid audits activity is responsible for auditing grants made to State agencies for 33 grant-in-aid programs administered by the Department. The State merit systems activity administers the personnel and merit system provisions contained in laws relating to grant-in-aid programs of the Department.

FIELD ADMINISTRATION

This activity is responsible for providing leadership and guidance in maintaining effective field operations, insuring uniform application of Department policy in the field, and promoting organizational and operating efficiency among the Department's field programs. In addition, it includes the regional directors responsibilities for leadership, supervision, and coordination in the field and providing effective and integrated business management and staff services to field establishments. Very substantial gains have been achieved in the objectives of coordination and more uniform and effective operations of the Department's various program responsibilities. Under supervision of the regional directors, related programs have been and will continue to be brought into much closer operating relations. In 1958 13,150 field employees were provided various administrative services relating to personnel, fiscal and general management and housekeeping services. In 1959 this number is estimated to increase to 15,900 due largely to OASI expansion resulting from the 1958 amendments to the Social Security Act. This increased staff to be serviced will continue into 1960. In general, production per clerk in these various activities is high and frequently exceeds accepted standards.

INCREASES

A request for three positions is made for this activity, two for headquarters and one for the field. A GS-13 staff assistant for the Director's office to permit timely and effective assistance to the regional offices in planning and coordinating integrated program activities such as mental retardation, juvenile delinquency, and rural development and to assist in making field surveys and evaluations for improving operations, and a clerk-stenographer for the Division of Field Management to overcome typing and secretarial deficiencies are the two positions for headquarters. The field position is a secretary for the Atlanta regional director's office that is presently operating with one secretary for both the director and executive officer and borrowed stenographers from management sections. Such an arrangement creates hardships to all concerned and should be corrected.

An increase is also requested to change the per-person rate for supplies from an average of \$26 to approximately \$35. The present rate represents the lowest in the Department and staffs of the operating agencies served have made many complaints of the inadequacy of supplies made available.

Funds are also included in this estimate for approximately 3 man-years of temporary clerical assistance to cope with peak workload periods in the regional

office management sections. Some of the factors which create peak periods are: end of fiscal year work in accounting units and end of calendar year work in payroll units such as compilation of Federal and State income tax data. These and other end of year activities add to the burden of these units in trying to maintain the normal workload on a reasonably current basis.

DIVISION OF GRANT-IN-AID AUDITS

This activity is responsible for auditing grants to State agencies for 33 Department grant-in-aid programs administered through the Public Health Service, the Social Security Administration, the Office of Vocational Rehabilitation, the Office of Education, and to review State activities in the utilization of Federal surplus property administered through the Division of Surplus Property. In addition, it works with the several program bureaus and offices in the development and interpretation of fiscal requirements and standards governing the use of grant-in-aid funds.

In 1958 an estimated \$3,600 million of expenditures, approximately one-half Federal funds, was audited. In 1959 and 1960 about \$4 billion is estimated. There will be a workload of approximately 2,170 audits in 1960. This compares with 1,970 estimated in 1959 and 1,870 in 1958.

INCREASED REQUIREMENTS

Expanded construction grants for sewage treatment and health research facilities, changes in requirements of medical care for public assistance recipients, acceleration of surplus property audits, and the new national defense education grants will have an increasing impact on the 1960 workload. Eleven new auditors are requested to cope with this anticipated increase in work. This increase will also prevent the substantial audit backlog estimated at 45 man-years of work as of June 30, 1959 from increasing.

Funds are also requested to reclassify assistants to auditors-in-charge of States from GS-9 to GS-11. These assistants work under general supervision but in their day-to-day operations, often at distant points throughout the State, must exercise a high degree of sound and independent judgment in determining the allowability of individual transactions. In addition, they contact a variety of public officials and must understand State-local relationships and Federal-State relationships and effectively perform assigned duties without disturbing either. This request is made to establish a grade commensurate with these responsibilities.

DIVISION OF STATE MERIT SYSTEMS

This activity administers the personnel and merit system provisions of 17 different types of grant-in-aid programs for the Bureau of Public Assistance, the Children's Bureau, the Public Health Service, and the Office of Vocational Rehabilitation. This function is also performed for the Bureau of Employment Security of the Department of Labor and for the Office of Civil Defense Mobilization. Funds are provided by these organizations.

In all the programs, this Division reviews the provisions of State plans and provides consultative service and technical materials to the States for the more efficient administration of their personnel systems. It also conducts field reviews of the personnel operations of 70 State merit systems and 290 State program agencies, exclusive of those which will be involved in civil defense operations.

INCREASES

No increase in staff is requested for 1960. A nominal increase in travel funds is requested in order that this office can maintain a regular schedule of visits to all States necessary to maintain essential Federal-State contacts.

INCREASES REQUESTED

Mr. LUND. We are asking for a very small increase of \$232,800 for 14 positions, 3 in the field administration activity—1 for my own office, 1 secretary for Atlanta, and 1 clerk in the Financial Management Branch—plus 11 audit positions in order to carry out the audit respon-

sibilities for the Department on all of the programs which we have to audit.

Senator HILL. Is this pretty much all the programs under social security?

Mr. LUND. Yes, this includes roughly 33 programs, we audit roughly \$4 billion annually and run a minimum of 2,176 audits per year.

Senator HILL. In other words, all these programs under social security we have been talking about this afternoon you have the responsibility for auditing?

Mr. LUND. That is correct.

Mr. KELLY. This also includes the grants-in-aid audits of the Public Health Service, Office of Vocational Rehabilitation, and Office of Education.

Senator HILL. It takes your Public Health Service operation?

Mr. KELLY. Yes, sir. Those which are grants to States, including the hospital construction program, are audited by the Grant-in-Aid Audits Division.

Senator HILL. In other words, all grants that are made under any programs under the Department of Health, Education, and Welfare, you are responsible for the audit of those?

Mr. LUND. That is right, for State and local units of government.

Senator HILL. The House did not reduce you any.

Mr. LUND. No, sir; they did not.

Senator HILL. They let you have the amount that the Budget recommended.

Mr. LUND. Yes, sir.

Senator HILL. With this amount do you think you can carry on these audits in a satisfactory manner?

MORE AUDITORS NEEDED

Mr. LUND. We will not be able to become current as a result of this number of auditors. We have a current backlog of roughly 45 man-years in the audit field. However, there are some programs as the legislation is passed that do not come into being for audit purposes until the year following. Therefore, we are not requesting auditors for that group. For example, in the new Education Defense Act, we will probably do our major auditing as of next year. This year we have asked only for enough auditors to prepare the background material and to perform a few field audits. We have asked for two auditors for surplus property, four for public assistance, and four for construction audits so we can prevent further backlogs.

Senator HILL. Are you behind on that now?

Mr. LUND. Yes, we are. Construction audits is one item to which we give priority because of the fact that the final contract settlements are not made until after audit. We are behind, but not seriously, in that such audits are committed to be made within so many days following notification. This arrangement, however, means a delay in other areas.

Senator HILL. Are you behind much in these other areas?

Mr. LUND. We are farther behind on public assistance than any other. We have frankly had to take advantage of this and other programs because of priority on construction projects which is essential in order that the contractors may be paid. Public assistance does have

more delays than we think are warranted, but this added group of auditors would give us material assistance.

Senator HILL. In other words, with these funds under this budget, you think you can make some definite progress so as to eliminate this backlog?

Mr. LUND. I would make this statement, sir. There are requested additional positions for us to do the job without increasing the backlog. We will not make any constructive inroads on the backlog.

Senator HILL. But you will not fall back any further?

Mr. LUND. That is right.

Senator HILL. What would it take to bring this up to date?

Mr. LUND. It would take roughly another 18 auditors. It depends on how fast you want to get rid of the backlog.

Mr. KELLY. There are 45 man-years of backlog, but you cannot accomplish that in 1 year and intelligently recruit a staff that you would be able to train and maintain. It has to be done gradually over a period of years. Somewhere between 10 and 15 auditors would be the number that would be an intelligent plan for accomplishing the backlog.

Mr. LUND. We figure we could not do it in a year. If we could whittle it down over a period of 2 or 3 years, it would be helpful. Our last estimate on total workload ran roughly about 18 additional auditors to put us current by 1963, if there were no more programs added to increase the workload. We can run that out, if you would like to have the figures, and give you an exact estimate.

Senator HILL. I think it would be a good idea to have the exact figure for the record. Will you give us the whole picture so we know what your situation is?

Mr. LUND. We would be glad to.

Senator HILL. And what would have to be done for you to become current over a period of reasonable time.

Mr. LUND. Yes, sir.

(The information referred to follows:)

BACKLOG OF AUDITS

Based on current workload projections, the backlog of audits is estimated to be 45.2 man-years at the end of June 30, 1959. On the assumption that audit positions are provided for increased workloads due to new and expanded legislation that has been enacted the following positions and funds would be necessary to eliminate the backlog. This is based on a 3-year plan which would provide sufficient time to recruit, train, and maintain a staff capable of eliminating the backlog. To become current, therefore, 18 additional auditors are needed as follows:

Eighteen auditors costing \$121,000 the first year and \$131,000 for each of the two succeeding years. First year cost is less due to anticipated recruitment problem resulting in a lapse factor.

BUDGET ALLOWANCE

Senator HILL. Are there any questions?

Senator BIBLE. I have just one question. I am wondering if you asked Budget for additional auditor positions so you could bring yourself closer to being current? Did you ask for additional auditors?

Mr. LUND. We did. We did not ask for the total amount needed.

Senator BIBLE. How many did you ask for?

Mr. LUND. I think our total request was 20 and I think our allowance was 11.

Senator BIBLE. You asked for 20 and you were given 11 by the Bureau of the Budget?

Mr. LUND. Yes.

Senator BIBLE. I have no other questions.

Senator HILL. Please give us the total figure as to personnel and cost and when you expect to become current over a reasonable period of time.

Mr. LUND. Yes, sir.

Senator HILL. We want to thank you very much, sir.

Mr. LUND. Thank you.

Senator HILL. Is there anything you wish to testify to?

Mr. LUND. If you wish, I could testify on the surplus property program.

SURPLUS PROPERTY UTILIZATION

APPROPRIATION ESTIMATE

“For expenses necessary for carrying out the provisions of subsections 203(j), (k), (n), and (o), of the Federal Property and Administrative Services Act of 1949, as amended, relating to disposal of real and personal excess property for educational purposes, civil defense purposes, and protection of public health, **[\$632,000] \$703,000.**”

Funds available for obligation

	1959 approp- riation	1960 budget estimate	1960 House allowance
Appropriation or estimate.....	\$687, 000	\$703, 000	\$703, 000

Obligations by activity

	1959 appropriation		1960 budget estimates		1960 House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Surplus property utilization.....	91	\$687, 000	93	\$703, 000	93	\$703, 000

Obligations by objects

Object classification	1959 approp- riation	1960 budget estimate	1960 House allowance
SUMMARY OF PERSONAL SERVICES			
Total number of permanent positions.....	91	93	93
Average number of all employees.....	87	89	89
Number of employees at end of year.....	87	90	90
01 Personal services.....	\$566, 350	\$581, 258	\$581, 258
02 Travel.....	49, 850	49, 850	49, 850
03 Transportation of things.....	1, 220	1, 220	1, 220
04 Communication services.....	20, 895	20, 895	20, 895
06 Printing and reproduction.....	2, 660	2, 660	2, 660
07 Other contractual services.....	4, 445	4, 475	4, 475
08 Supplies and materials.....	4, 100	4, 190	4, 190
09 Equipment.....	1, 000	1, 000	1, 000
11 Grants, subsidies, and contributions: Contribution to retirement fund.....	36, 310	37, 282	37, 282
13 Refunds, awards, and indemnities.....			
15 Taxes and assessments.....	170	170	170
Total obligations.....	687, 000	703, 000	703, 000

Summary of changes

	Positions	Amount
1959 actual appropriation.....	91	\$632,000
1959 supplemental appropriation.....		55,000
Total, 1960 base.....	91	687,000
1960 appropriation request.....	93	703,000
Net change requested.....	+2	+16,000

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases:				
For mandatory items:				
Annualization of pay increase cost in 1959.....		\$2,000		\$2,000
Extra days' pay (261 days in 1959 and 262 days in 1960).....		2,315		2,315
For program items:				
2 positions (headquarters) for expanded activities due to machine tool program.....	2	8,370	2	8,370
Adjustment to reduce excessive lapse.....		3,315		3,315
Total change requested.....	2	16,000	2	16,000

New positions requested

	Grade	Annual salary
Clerk.....	GS-7.....	\$4,992
Do.....	GS-5.....	4,056
Total new positions (2).....		9,048

INCREASES IN SURPLUS VOLUME

Mr. LUND. I think the volume of surplus is increasing. We have increased the volume up to roughly \$300 million. It stepped up 30 percent over 1957, and we expect it to go even further this coming year to be a total of between \$325 million and \$350 million. In 1958 our real property transfers to health and educational institutions had an acquisition cost of \$9,412,000. We expect that to be increasing because the armed services and other units of Government are clearing out their inventories, which is the base source for making this property available.

Last year we collected \$820,852, which was deposited back into the Treasury, which was more, of course, than the total cost of the program as far the Department's operation was concerned.

This year we will drop a little below that amount. We estimate that our collections will amount to \$550,000. On the overall, however, including this request, we have returned to the Treasury considerably more money than the total operation of this program has cost the Government. Our request this year is for \$703,000.

Senator BYRD. So the cash collection this year will not equal the cost of the program?

Mr. LUND. No, sir; we don't anticipate that it will, but adding it over the years, I think we have collections—and I will be right within some thousands of dollars—\$2,717,000 in excess of the total cost.

Senator HILL. That is in excess of the total cost?

Mr. LUND. Yes, sir.

Senator HILL. In other words, you have that much to your credit as against this \$703,000 you are now asking for?

Mr. LUND. That is right.

ADDITIONAL POSITIONS

Senator BYRD. How many additional positions will this involve?

Mr. LUND. This involves only two positions to handle a special machine tool program in which the schools are particularly interested. That program is doing well, but not as well as it should. Our average allocation in previous years was 1,700 machine tools to schools. Last year that jumped up to roughly 3,700, and this year in the first quarter we have allocated to schools through the State program in excess of 2,500. So we are saying that a minimum this year will be approximately 10,000 units. It is a program in which there is an intense interest on the part of school people throughout the country.

PERSONAL AND REAL PROPERTY AVAILABLE

Senator HILL. Under your act, if surplus property is usable and needed for education, health, and civil defense it may be donated for these purposes?

Mr. LUND. Yes, sir.

Senator HILL. How much personal and real property was made available in fiscal 1958? What is the estimate for fiscal 1959? 1960?

Mr. LUND. In fiscal 1958, \$311,870,234 was made available. The estimate for fiscal year 1959 is \$340 million. The estimate for fiscal year 1960 is \$365 million.

Senator HILL. How much surplus property (real and personal) will be declared in these years according to estimates?

Mr. LUND. The estimates available are those of GSA—about \$8 billion for 1959 and about \$10 billion in 1960.

Senator HILL. Then the education, health, and civil defense programs take but a small part of the total?

Mr. LUND. Only a small percent.

Senator HILL. What happened to the balance of the surpluses?

Mr. LUND. Mostly they are sold by the holding agencies.

SCREENING SURPLUS PROPERTY

SENATOR HILL. Who screens the property, Federal or State people? Tell us how it works.

Mr. LUND. State employees regularly visit the disposal areas and inspect available surplus property to determine its usability for health, education, and civil defense purposes. These screeners are authorized representatives (for screening purposes) of the Department and are responsible for identifying property useful and needed in their own States and also in other States. Surplus property selected by the screeners is assigned to the Department of Health, Education, and Welfare by the General Services Administration and is allocated to the State surplus property agencies by the Department's regional offices.

Senator HILL. Then the State screeners in New York, Pennsylvania, Texas, and elsewhere screen for themselves and for the States that do not have large military installations?

Mr. LUND. That is correct.

Senator HILL. Then the success of the program depends on the kind of a screening job that the States do for themselves and the national program?

Mr. LUND. Yes, sir, to a large extent this is correct.

Senator HILL. And if there are not enough screeners or they do not do a good job, the property may be lost to the program?

Mr. LUND. Yes, sir.

Senator HILL. If it is sold what is the likely return to the Government?

Mr. LUND. Roughly 5 to 6 percent of the acquisition cost.

Senator HILL. Where is most of the usable property located?

Mr. LUND. In fiscal year 1958 more than 50 percent of the property suitable for donation was located in 5 States, and more than 75 percent was located in 12 States.

Senator HILL. Would it not pay to have a sufficient number of Federal screeners available to insure that the optimum amount of property is claimed for the program?

Mr. LUND. It is my opinion that an adequate number of well-trained screeners would produce additional usable and needed property.

Senator HILL. How many Federal screeners would it take to do the job on the optimum basis?

Mr. LUND. On the basis of estimated volume, about 14 persons would be required at the present time.

Senator HILL. How much more property do you estimate they would generate for the program?

Mr. LUND. Approximately \$40 million annually.

Senator HILL. Putting a few more screeners on the job, then, would be an investment and not an expenditure for the public, would it not?

Mr. LUND. It would appear that the additional utilization of this property would be in the public interest.

Senator HILL. What is the situation so far as real property is concerned?

Mr. LUND. The volume of available surplus real property has increased substantially in recent months. Should this increase continue, staff in the regional offices will have great difficulty in processing the transfers within the established time limitations.

Senator HILL. You have not found any failure to take advantage of the program?

Mr. LUND. No, sir.

Senator HILL. Certainly that has been my observation. They have been very eager to take advantage of it.

Are there any further questions? If not, we want to thank you very much, sir. You have been helpful and we appreciate it.

Your statement may be inserted in the record.

(The statement referred to follows:)

STATEMENT OF DIRECTOR, OFFICE OF FIELD ADMINISTRATION, ON SURPLUS PROPERTY UTILIZATION

Mr. Chairman and members of the committee, the Federal Property and Administrative Services Act of 1949 (Public Law 152, 81st Cong.), as amended, assigned to the Secretary three major responsibilities in the field of surplus property: (1) determination of surplus personal property needed for educational and public health purposes and the allocation of that property to State agencies for distribution to educational and public health institutions; (2) disposal of surplus real property for educational and public health purposes, subject to the 30-day right of disapproval of the Administrator of the General Services Administration; and (3) administering the interests and rights reserved to the United States under the terms and conditions of transfers made for educational and public health purposes, including the coordination of recapture of property for use during national emergencies. By delegation of authority from the Administrator of the Office of Civil and Defense Mobilization, the Secretary is also responsible for allocation of surplus personal property for civil defense purposes.

SUMMARY OF ESTIMATE

This request totals \$703,000 which represents an increase of \$16,000 over the amount estimated to be available for 1959 and will allow for two additional clerical positions.

PERSONAL PROPERTY

The volume of surplus property allocated for donation for health, educational, or civil defense purposes in 1958, \$302,458,000 acquisition cost, was 30 percent greater than in 1957. In 1959 and 1960, it is estimated that the Department will allocate \$325 million and \$350 million, respectively. To process this additional workload, it will be necessary to expand agreements with State agencies for furnishing additional help to regional offices under the cooperative agreement procedures. A number of State agencies will need to expand their programs by providing increased State staff and improving their distributive facilities.

Major emphasis is and will be placed on assisting State agencies to improve their operations in order to obtain better State distribution.

Intensified activities in the surveying of machine tool inventories and further liquidations of excess contractor inventories are resulting in a substantially increased number of machine tools becoming surplus. Screening these inventories for the purpose of channeling a maximum number of usable machine tools into educational utilization has substantially increased the workload of this Division. In 1958, approximately 3,700 machine tools were allocated. In 1959, it is estimated that between 8,000 and 9,000, and in 1960, approximately 12,000 machine tools will be allocated.

REAL PROPERTY

As in the past the number of real properties becoming available through surplus for transfer to health and educational institutions continues to increase. During 1958, real property having an acquisition cost of \$9,412,000 was transferred for both offsite use and use in place. It is estimated that such transfers for 1959 and 1960 will be between \$15 million and \$20 million.

In 1958 the number of new transfers was three and one-half times the average number for the last 8 years. There is an ever increasing demand for surplus buildings and land.

STANDARDS AND REVIEWS

The workload, with respect to minimum standards of operations and other standards and guides for State agency operations, should remain about the same in 1960 as in 1959. Liaison with the Grant-in-Aid Audit Division with respect to surplus property audits and followup for corrective action is a new activity which will result in a considerable increase in workload.

UTILIZATION AND COMPLIANCE ACTIVITIES

During 1958, 1,358 personal property compliance and utilization cases were handled and reported. Approximately 4 percent of the cases required some legal action and/or investigation by the FBI.

There were 487 deed cases at the end of 1958 requiring annual utilization surveys and 1,296 cases involving properties removed for use off-site which requires a minimum of one inspection and utilization survey during the 5 year period of restrictions. There were 186 real property compliance and utilization cases pending on June 30, 1958.

COLLECTIONS

Cash collections, as a result of all activities of the Division, amounted to \$820,852 during 1958. It is estimated that collections for 1959 and 1960 will be in excess of \$550,000.

In addition, it is anticipated that there will continue to be title reversions to real property, which in 1958 amounted to \$109,000.

INCREASE IN STAFF REQUIREMENTS

An increase of \$16,000 is requested for 1960. This will allow for two clerical positions at headquarters. These positions are necessary in order to meet the increased workload resulting from the expanded activity in machine tools. It will enable the Division to allocate the maximum number of tools to educational institutions without impairing present operations.

Senator HILL. Mr. Banta.

SALARIES AND EXPENSES, OFFICE OF THE GENERAL COUNSEL

STATEMENT OF PARKE M. BANTA, GENERAL COUNSEL; ACCOMPANIED BY JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

“For expenses necessary for the Office of the General Counsel **[\$505,000]** \$619,000, together with not to exceed **[\$25,000]** \$27,000 to be transferred from the appropriation ‘Salaries and expenses, certification and inspection services’, and not to exceed **[\$450,000]** \$519,000 to be transferred from the Federal old-age and survivors insurance trust fund.”

Amounts available for obligation

	1959 appropriations	1960 budget to Congress	House allowance
Appropriation.....	\$505,000	\$619,000	\$589,700
Supplemental.....	55,400		
Advances and reimbursements from:			
Federal OASI trust fund.....	450,000	519,000	510,200
Supplemental.....	51,400		
Certification and inspection services, Food and Drug Administration.....	25,000	27,000	27,000
Supplemental.....	2,000		
Total obligations.....	1,088,800	1,165,000	1,126,900

Obligations by activities

	1959 estimate		1960 estimate		House allowance	
	Positions	Amount	Positions	Amount	Positions	Amount
1. Supervisory and general legal services.....	25	\$235,392	25	\$239,890	25	\$237,940
2. Departmental program services:						
(A) Public Health.....	11	87,091	13	95,914	11	88,415
(B) Food and Drug.....	32	226,082	34	248,912	32	239,498
(C) OASI.....	29	169,389	29	183,539	29	183,539
(D) Welfare and Education.....	13	99,835	16	120,718	13	101,481
3. Regional and field.....	33	271,011	33	276,027	33	276,027
Total obligations.....	143	1,088,800	150	1,165,000	143	1,126,900

Obligations by objects

Description	1959 estimate	1960 estimate	House allowance
Total number of permanent positions.....	143	150	143
Average number of all employees.....	133	144	133
Number of employees at end of year.....	139	148	139
01 Personal services.....	\$988,074	\$1,059,173	\$1,025,227
02 Travel.....	9,000	9,000	9,000
03 Transportation of things.....	100	100	100
04 Communications.....	5,560	6,120	5,560
06 Printing and reproduction.....	1,200	1,200	1,200
07 Other contractual services.....	6,200	6,200	6,200
08 Supplies and materials.....	6,615	6,954	6,615
09 Equipment.....	11,450	11,029	9,915
11 Grants, subsidies, and contributions.....	59,551	63,874	61,733
15 Taxes and assessments.....	1,050	1,350	1,350
Total obligations.....	1,088,800	1,165,000	1,126,900

Summary of changes

	Positions	Amount
1959 actual:		
Appropriation.....	136	\$505,000
OASI and food and drug transfers.....		475,000
1959 supplemental:		
Appropriation.....	7	55,400
OASI and food and drug transfers.....		53,400
1959 total.....	143	1,088,800
Deduct: nonrecurring equipment.....		-2,697
Revised 1960 base.....		1,086,103
1960 budget request:		
Appropriation.....	150	619,000
OASI and food and drug transfers.....		546,000
1960 total request.....		1,165,000
Net change requested.....	+7	+78,897

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
INCREASES				
For mandatory items:				
Annualization costs of 7 additional positions authorized in 1959.....		\$20,951		\$20,951
Annualization of pay increase costs in 1959.....		15,000		15,000
Extra days' pay (261 days in 1959 and 262 days in 1960).....		3,631		3,631
Subtotal.....		39,582		39,582
FOR PROGRAM ITEMS				
1. Supervisory and general legal services: Miscellaneous expenses, primarily for new positions requested.....		3,175		1,215
2. To strengthen the Public Health Division.....	2	7,489		
3. To strengthen the Food and Drug Division.....	2	9,414		
4. To strengthen the Welfare and Education Division, primarily for legal services in connection with the National Defense Education Act.....	3	19,237		
Total change requested.....	7	78,897		40,797

EFFECT OF HOUSE ACTION

The House allowance, amounting to \$1,126,900, is a reduction of \$38,100 from the estimate and provides funds to cover the cost of the mandatory items but does not provide for the seven new positions (four attorneys and three secretaries) requested in 1960. The expansion of all of the Department's program operations has been greatly out of proportion to the rate of expansion in the Office of General Counsel. The workload for lawyers has likewise increased out of proportion to the increase in the legal staff. The seven positions requested are urgently needed.

New positions requested, fiscal year 1960

	Grade	Annual salary
Public health:		
Attorney-----	GS-7-----	\$4,992
Secretary-----	GS-4-----	3,765
Total (2)-----		8,757
Food and drug:		
Attorney-----	GS-11-----	7,030
Secretary-----	GS-4-----	3,765
Total (2)-----		10,795
Welfare and education:		
Attorney-----	GS-12-----	8,341
Do-----	GS-11-----	7,030
Secretary-----	GS-4-----	3,765
Total (3)-----		19,136
Total new positions, all activities (7)-----		38,688

Mr. BANTA. We have such a small amount of money to ask for that I think I will just file my statement for the record.

Senator HILL. Very well, sir.

(The statement referred to follows:)

STATEMENT OF GENERAL COUNSEL ON SALARIES AND EXPENSES, OFFICE OF THE GENERAL COUNSEL

The Office of the General Counsel performs all of the legal work incident to the activities of the Department. The workload of the office grows out of (1) the needs for legal assistance by the Secretary; the Surgeon General of the Public Health Service; the Commissioners of Social Security, Education, and Food and Drugs; the Director of the Office of Vocational Rehabilitation and their staffs; (2) work on legislation involving preparation of reports to Congress and legislative drafting; and (3) litigation arising from program activities.

The new legislation of the past few years and particularly that of the 85th Congress, along with the continuance of the expansion of the Food and Drug Administration and the maturization of the OASI and disability program, has resulted in a material increase in the workload for the Office of General Counsel in the past year.

BUDGET REQUEST FOR 1960

The 1960 budget estimate requests a total of \$1,165,000 represented by a direct appropriation of \$619,000 plus \$519,000 to be transferred from the OASI trust fund and \$27,000 from fees collected from food and drug certification services. This is an increase of \$76,200 over fiscal year 1959 and will provide for seven new positions, four attorneys and three secretaries in the Public Health, Food and Drug, and Welfare and Education Divisions.

Supervisory and general legal services

Overall professional supervision and coordination of the work for the entire Office of the General Counsel, including office management functions are handled in the immediate office of the General Counsel. This office provides legal advice on purely departmental matters, delegations of authority, orders, manuals, and

like functions; also legal advice regarding procurement, including research and development contracting, property management, and surplus property disposal. In this office also is the Department's tort claims officer. In addition, the immediate office of the General Counsel assumes responsibility for liaison with the Department of Justice, the legal offices of other departments and agencies regarding legal problems of mutual concern, and such legal matters as do not logically fall within the scope of the other divisions of the Office of the General Counsel. The workload continues heavy from year to year, particularly in the field of contracts for educational research and cancer chemotherapy research.

In the Legislation Division, the workload continues to increase. During the two sessions of the 85th Congress the unit received 1,240 requests for reports on proposed legislation and prepared or reviewed 767 of these reports, as compared with 1,105 requests and 733 reports during the preceding Congress.

Public Health Division

The Public Health Division provides legal services to the Public Health Service and St. Elizabeths Hospital. While for many years the legal staff of this Division has not increased (eight attorneys from fiscal 1953 through 1959), the Public Health Service during this same period has become responsible for a number of new programs activities and has witnessed a large expansion of most all its activities, all of which requires increased legal services which cannot be effectively provided without additional legal staff. Significant program increases include (1) a large-scale chemotherapy research effort beginning with cancer in 1956, implemented by contract, and enlarged in fiscal 1959 to include psychopharmacology and other disease fields and (2) reorganization and enlargement of the licensing program for biologicals such as poliomyelitis vaccine, which has grown from a \$338,000 program in 1954 to over \$2,200,000 in fiscal 1959.

The increase of one attorney and one secretary is requested primarily to provide services for this enlarged biologics control program and to serve more adequately the expanding chemotherapy and related programs.

Food and Drug Division

This Division provides all legal services to the Food and Drug Administration in the enforcement of the Federal Food, Drug, and Cosmetic Act. The volume of legal work continues to increase with the expansion of the activities and the increases in the responsibilities of the Food and Drug Administration. In fiscal 1958 the caseload increased more than 18 percent over the preceding year, and with a continuation of the increased tempo of enforcement, there is every indication that the legal workload will increase at about the same ratio. The need for one additional attorney and one secretary requested is indicated in order to keep up with the present demands for additional service and the additional demands which we anticipate will come from increased enforcement activities.

Old-Age and Survivors Insurance Division

This Division furnishes legal advice and services in connection with the administration of old-age, survivors and disability insurance under title II of the Social Security Act. The very substantial amendments to the act in 1954, 1956, 1957, and 1958, along with the natural growth of the program, continues to provide a heavy workload for our legal staff in this Division. The social security amendments of 1958, Public Laws 85-785, 786, 787, 798, and 840 make important substantive and procedural changes in the program. The number of claims for benefits being filed with the Bureau continues to increase each year, and the number of difficult cases requiring legal advice will increase in about the same ratio. The impact of the disability provisions continues, and has resulted in a very substantial increase in the cases heard by the referees and litigated in the courts. Actual court cases in which the Division assisted the Department of Justice with the pleading and the briefs increased from about 82 civil cases in fiscal 1957 to about 122 new cases in fiscal 1958. This rate of increase is continuing primarily because of the cases involving disability.

Welfare and Education Division

The lawyers in this Division serve the Bureau of Public Assistance, the Children's Bureau, and the Bureau of Federal Credit Unions in the Social Security Administration; the Office of Education and the Office of Vocational Rehabilitation. They also are called upon to provide some legal services in connection with Federal payments to the American Printing House for the Blind, Howard University, and Gallaudet College.

With the variety and complexity of the offices and programs served, the workload of this Division has always been heavy. However, since the passage of Public Law 85-864, National Defense Education Act of 1958, there has been a tremendous increase in the legal services required. This act consists of 10 titles and establishes 8 separately identifiable programs administered by the Office of Education. Immediately on enactment of this legislation, virtually the entire staff of the Division was applied in order that the work of the Office of Education could proceed without undue delay for lack of legal services. Services to other activities were necessarily curtailed and since the work in connection with the National Defense Education Act will continue very heavy through fiscal 1960 and beyond, the increases in staff requested, two attorneys and one secretary, are necessary if we are to furnish the required legal services in this most important program.

Regional and field

Legal services furnished by regional and field attorneys correspond in kind to those rendered by the departmental legal staff, all programs being serviced in the field except Food and Drug Administration. The OASI and disability program accounts for approximately two-thirds of the total workload. The present legal staffing has been in effect in our regional offices for several years. During these same years there has been tremendous increase and growth in all programs.

HOUSE ALLOWANCE

Mr. BANTA. I would say in summary that the House allowance amounted to \$38,100 less than the total amount we asked for, and amounted to half of the increase allowed us by the Budget.

Senator HILL. In other words, the House allowed you approximately one-half of what the Budget had increased?

Mr. BANTA. That is right. The effect of this action is explained in my statement. It will prevent us from increasing our personnel.

Senator HILL. Tell us why you need to increase your personnel.

NEED FOR ADDITIONAL PERSONNEL

Mr. BANTA. Senator, I think the Office of General Counsel has had a smaller increase personnelwise and perhaps moneywise than any area that we serve; we have had no substantial increase percentage-wise in our staff in the last 6 years. You know how very much all the program work of the Department has increased. It merely means that we either neglect to do a good job or the work just piles up on our desks. We very badly need the additional positions that are asked for here. Take the National Education Defense Act alone—I wouldn't like to venture a guess at the number of overtime hours that lawyers put in in order to help the Office of Education implement that act with regulations. Of course, there are still many problems connected with it which will require legal service. Then we have new programs.

Mr. KELLY. You recall the point was made for need of additional lawyers.

Senator HILL. Dr. Derthick, who is the Commissioner of Education, urged us to give you more funds, because he said he and his office had to call on you so heavily at this time and so much needed your legal advice and assistance. He knew of his own knowledge how much you needed this additional personnel.

Mr. BANTA. We do. Three of the seven persons would be allocated to the Office of Education. Whether or not it would be enough, that is the way we would use it. Two of them would be in the Food and

Drug Division, the work of which has been increased and is still being increased.

Senator HILL. We passed legislation last session known as the chemical additive bill, amending the Pure Food and Drug Act which undoubtedly has given additional problems and additional work to do.

Mr. BANTA. Yes, and we have in the National Institutes of Health, the chemotherapy program and the contracting that is involved. Then there are so many things that are not easily described that lawyers are called upon to do that require our time. There is no escape from it. It would be rather difficult to describe the time-consuming things that we are requested to do. We cannot illustrate with statements in the record without using an excess amount of printed material to do it. We do, however, have a very great need for the additional money in order to provide the 7 positions mentioned.

Senator HILL. How many positions did you originally ask for?

BUDGET ALLOWANCE

Mr. BANTA. You mean the number requested of the Bureau of the Budget?

Senator HILL. Yes.

Mr. BANTA. We asked for 24 more than were allowed.

Senator HILL. You asked for 24 and they allowed you 7, and the House disallowed those 7. You really felt the need for 24 new positions?

Mr. BANTA. Very badly. Senator, you know the old-age and survivors insurance program is just now maturing—we are paying 14 million people—I don't know how many claims are filed in the course of a month. But there are a great many thousand of claims. Of course, they have increased in number as the program has matured. In addition to the maturity of the program which provides benefits for persons who attain 65 and retire, there is the disability benefits program now. There have been literally thousands of applications made for disability benefits. The lawyers don't get all of these, but a certain percentage of all claims or applications filed will present problems requiring legal determinations. The larger number there are filed, therefore, the greater the increase in the workload for us.

I think I told the House Appropriations Committee that our litigation load in the old-age and survivors insurance approaches 11½ cases per day. I took a look afterward and concluded that was a few more than we get, but we are getting about one lawsuit filed a day. While of course we do not handle these cases in the court, the Department of Justice does that, we are the reference attorneys, and we have to supply a file which is suitable for use by the U.S. attorneys. Therefore, we in effect prepare the cases for trial.

Senator HILL. You sort of prepare their brief for them?

Mr. BANTA. That is right.

Senator HILL. You make sure they have all the facts and the law applying to the cases?

Mr. BANTA. That is right. In that connection we often have to go back and help the Bureau people get the records in shape for use for the Department of Justice. It is a very big burden for a small office.

TOTAL LAWYERS

Senator HILL. How many lawyers do you have now?

Mr. BANTA. We have 87 authorized for 1959.

Senator HILL. How is that figure now? You have 87 on the payroll now?

Mr. BANTA. Eighty-seven authorized, seventy-five on the payroll.

Senator HILL. Eighty-seven authorized. When you say authorized, do you mean that you have that many? You have funds to pay them?

Mr. BANTA. No, those are positions. There will always be a few vacancies during the year. The Budget people know this and make due allowance for it. The average number of lawyers on the payroll throughout a given year will be about 10 percent under the number authorized. The normal turnover in employment will account for this.

Senator HILL. And the Budget estimate would give you four more lawyers in addition to those?

Mr. BANTA. Yes, sir, it would give us four more legal positions and three secretaries.

Senator HILL. You mean the term secretaries? Is that largely stenographic?

Mr. BANTA. Yes. In fact, practically all of our nonlegal work is stenographic. We have some other nonlegal work, budget, personnel, and file maintenance, for example.

DEPARTMENTAL ALLOWANCE

Senator HILL. But the Department went along with you with that request for 24 new places?

Mr. BANTA. Yes.

Mr. KELLY. That is correct.

Mr. BANTA. Actually we intended to put 13 of those 8 attorneys and 5 stenographers in the field, Senator. We have a regional attorneys office in each of the cities where the Department has a regional office. I think our regional legal offices have not grown at all in the 6 years I have been General Counsel. We have the same number of lawyers in the New York region and Dallas and Atlanta and San Francisco, and others as we have had all along.

Senator HILL. When you say all along, how long have you been General Counsel?

Mr. BANTA. Six years.

Senator HILL. The same number you had when you came and before we passed these additional acts?

NO STAFF INCREASE FOR NEW WORK

Mr. BANTA. That is right. The field staff in these regional offices, and by field staff, I mean the administrative people representing the various operating agencies of the Department, has increased substantially. I have been informed, since the close of business June 30, 1955, the regional staff generally has increased 79 percent and OASI 89 percent. The same legal staff in New York where you have the increase in personnel of clients amounting to 79 percent have a terrific time serving them, where there is no increase in the legal staff at all. That is true also in Chicago and each one of the regional offices. We asked for one additional lawyer and one secretary to be

assigned in the field where they have these problems to deal with and these additional people to serve. We were denied the 24 positions most of which were intended for the field.

Senator HILL. Is there anything you want to add, Mr. Kelly?

Mr. KELLY. No; I do think if all of the Commissioners had thought of it as Dr. Derthick did, they would have all indicated the need in the General Counsel's office for additional staff.

Senator HILL. You might give us the figure that was requested for the additional 24 places.

Mr. KELLY. The breakdown of that?

Senator HILL. Yes, sir; give us that breakdown so we may have it at this point in the record.

Mr. KELLY. Yes, sir.

(The information referred to follows:)

Following is a distribution by activity of the 24 positions eliminated by the Bureau of the Budget, amounting to \$132,000 (\$68,000 from appropriated funds and \$64,000 from the Federal OASI trust fund) :

Activity	Attorneys	Secretaries	Total
Supervisory and general legal services.....	1	0	1
Public Health.....	1	0	1
Food and Drug.....	2	0	2
OASI.....	3	1	4
Welfare and Education.....	2	1	3
Regional and field.....	8	5	13
Total.....	17	7	24

WHITE HOUSE CONFERENCE ON AGING

STATEMENT OF CLARK TIBBITTS, ASSISTANT DIRECTOR, SPECIAL STAFF ON AGING; ACCOMPANIED BY JAMES F. KELLY, DEPARTMENT BUDGET OFFICER

APPROPRIATION ESTIMATE

"For necessary expenses in carrying out the provisions of the White House Conference on Aging Act, [including services as authorized by section 15 of the Act of August 2, 1946, as amended (5 U.S.C. 55a), \$100,000] \$452,000."

Amounts available for obligation

	1959 appro- priations	1960 budget to Congress	1960 House allowance
Appropriation.....	\$100,000	\$452,000	\$452,000
Supplemental estimate.....	844,000	-----	-----
Total available for obligation.....	944,000	452,000	452,000

Obligations by activities

Description	1959 estimate		1960 estimate		House allowance	
	Posi- tions	Amount	Posi- tions	Amount	Posi- tions	Amount
Grants to States.....		\$810,000				
Technical assistance to States and planning of conference.....	9	134,000	31	\$452,000	31	\$452,000
Total.....	9	944,000	31	452,000	31	452,000

Obligations by objects

Object classification	1959 estimate	1960 estimate	House allowance
Total number of permanent positions.....	9	31	31
Full-time equivalent of all other positions.....	1	1	1
Average number of all employees.....	6	30	30
Number of employees at end of year.....	9	30	30
01 Personal services.....	\$49,723	\$219,372	\$219,372
02 Travel.....	20,600	38,200	38,200
03 Transportation of things.....	400	3,000	3,000
04 Communication services.....	1,750	3,480	3,480
06 Printing and reproduction.....	16,000	25,000	25,000
07 Other contractual services.....	800	18,300	18,300
Services performed by other agencies.....	38,347	121,891	121,891
08 Supplies and materials.....	400	1,900	1,900
09 Equipment.....	3,750	7,600	7,600
11 Grants, subsidies, and contributions.....	810,000		
Contributions to retirement fund.....	2,230	13,257	13,257
Total obligations.....	944,000	452,000	452,000

New positions requested, fiscal year 1960

	Grade	Number	Annual salary
Specialist in aging.....	13	1	\$9,901
Regional specialist in aging.....	13	9	89,109
Clerk.....	7	1	4,992
Secretary.....	5	9	36,504
Secretary.....	4	2	7,530
Total.....		22	148,036

Summary of changes

	Positions	Amount
1959 actual appropriation.....	6	\$100,000
1959 supplemental appropriation:		
Administrative expenses.....	3	34,000
Grants to States.....		810,000
Total appropriation.....	9	944,000
Deduct nonrecurring costs:		
Equipment.....		-3,750
Grants to States.....		-810,000
Revised 1960 base.....	9	130,250
1960 appropriation request.....	31	452,000
Net change requested.....	+22	+321,750

Summary of changes—Continued

	1960 budget estimate		1960 House allowance	
	Positions	Amount	Positions	Amount
Increases:				
For mandatory items:				
Annualization of 9 new positions filled for part of 1959 (6 positions authorized for 60 percent of year and 3 positions for 25 percent of year).....		\$37, 198		\$37, 198
Annualization of staff of technical project directors:				
Authorized payment to Housing and Home Finance Agency and Labor Department for 50 percent of year 1959.....		17, 414		17, 414
Payment to 5 organizations within Department of Health, Education, and Welfare for 25 percent of year 1959.....		66, 130		66, 130
Extra day of pay (261 days in 1959 and 262 days in 1960).....		275		275
Subtotal.....		121, 017		121, 017
For program items:				
1. 18 regional positions (9 GS-13 and 9 secretaries) to assist States and communities in the planning and organization of the conferences and to work with the regional directors in conducting the Department's activities in this field. 4 departmental positions are included to prepare case studies of programs in aging, and to handle correspondence, publications distribution, and certain other details.....	22	183, 233	22	183, 233
2. Contractual services to hire experts to develop basic papers in subject matter areas where a full-time project director is not required.....		17, 500		17, 500
Total change requested.....	22	321, 750	22	321, 750

STATEMENT OF THE SECRETARY

Senator HILL. Mr. Tibbitts, we are glad to have you. You are going to address yourself to the White House Conference on Aging.

Mr. TIBBITTS. Yes, sir. I have a summary statement which the Under Secretary asked me to read. It's one page or I can summarize in two sentences, whichever you prefer.

Senator HILL. Very well, sir.

Mr. TIBBITTS. We are asking for a total of \$452,000.

Senator HILL. This is legislation we passed at the end of the last session of Congress.

Mr. TIBBITTS. That is right. Ever since then the planning has been underway and is now pretty well developed. This request is for \$452,000 for salaries and expenses for next year. This is \$318,000 over the base amount for this year, and most of it would be used to place regional specialists in the regional offices to assist the States and communities in developing their plans for the Conference.

In this Conference we are putting a great deal of emphasis on State action and State effort. Many of them are already underway and are seeking the kind of help that we would like to give them.

Senator HILL. You had \$100,000 for this year?

Mr. TIBBITTS. We had \$100,000 that you made available last summer. Then there is a supplemental in now which has \$34,000, for our office, and \$810,000 for grants to the States.

1961 ESTIMATE

Senator HILL. If you get the amount of \$452,000 for 1960—this Conference won't be until January 1961—you will need additional funds in 1961.

Mr. TIBBITTS. Yes, sir.

Senator HILL. Can you estimate what that will be at this time?

Mr. TIBBITTS. Approximately of the same order.

Senator HILL. You mean the same as this year?

Mr. TIBBITTS. Yes, sir, as we have requested for this year.

SITUATION IN STATES

Senator HILL. Are the States ready to go ahead with their part of the program?

Mr. TIBBITTS. Every single one of them has indicated that they are. A number of them are rather ahead of us on their planning and asking for assistance which then we are not altogether prepared to give them.

Mr. KELLY. As you know, Mr. Chairman, we are quite anxious to have the supplemental enacted so that those State funds can get out to the States.

Senator HILL. Are there any questions, gentlemen?

Senator BIBLE. I have none, Mr. Chairman.

Senator BYRD. No, thank you.

Mr. TIBBITTS. Mr. Chairman, I might say West Virginia is one of the most active States, as well as Nevada. We are going to visit with West Virginia later this week to help them get ready for their planning for the Conference and Mississippi next.

Senator HILL. When are you going to come down to Alabama?

Mr. TIBBITTS. As soon as we are requested to go. There is a good bit of interest in the aging by the people in Alabama.

Senator HILL. Yes. I know that Senator Byrd and Senator Bible are very conversant with this situation and the problems it presents. Are there any other questions?

Senator BYRD. No, Mr. Chairman.

Senator HILL. Is there anything you want to add, Mr. Kelly?

Mr. KELLY. If you are finished with this item, yes.

Senator HILL. I think we are. We are certainly much obliged to you, Mr. Tibbitts. We appreciate your appearance here.

Mr. TIBBITTS. Thank you.

Senator HILL. Your statement may appear in the record at this point.

(The statement referred to follows:)

STATEMENT OF UNDER SECRETARY, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, ON WHITE HOUSE CONFERENCE ON AGING

Mr. Chairman and members of the committee, the White House Conference on Aging Act, Public Law 85-908, provides for a national conference to be held in January 1961 to develop recommendations for action in the field of aging. Equally important will be nationwide preconference planning, including State and local conferences.

Deliberations in all of the local and State meetings which we expect will be held and in the national White House Conference will have to be based on the most comprehensive and detailed data regarding the circumstances and needs of older persons which can be made available. The factfinding activities and the State and White House Conferences will necessitate a great deal of preparation, consultation, assembly, and analysis of data, and preparation of basic

documents such as background papers, fact sheets, workbooks, and conference guides. The subject matter of the Conference on Aging will cover a wide range of fields, and data collection and analysts facilities common to other fields are not available in the field of aging.

In 1959 \$100,000 was appropriated to initiate planning, begin preparation of materials, and recruit personnel. Funds for payment to the States amounting to a total of \$810,000 are included in a supplemental budget of \$844,000 proposed for fiscal year 1959. These payments, which will provide a maximum of \$15,000 to each of the States, will be available for use for a period of 21 months in connection with State and local planning and the White House Conference. For fiscal year 1960 we are asking for a total of \$452,000 for salaries and expenses. This is \$318,000 over the amount for salaries and expenses in 1959 and will provide for 22 additional positions to be used primarily for accelerating the program in the regional offices.

ADVISORY AND TECHNICAL COMMITTEES

The Advisory Committee, required by law, is now being selected and in 1960 will be meeting for the second time. This is a committee made up of citizens and experts in the field of aging. From this group about 15 planning committees will be organized, composed of nongovernmental specialists in specific aspects of the field of aging. These planning committees will outline the content of the basic papers to be used in discussion at local and State conferences and at the White House Conference, will help identify problems and issues for conference consideration, and will assume responsibility for the conduct of the section meetings at the Conference.

STAFF REQUIREMENTS, 1960

In a field as relatively new and unexplored as is this one, the States will need much more information and assistance than they can obtain with the help of the maximum grant of \$15,000. They will need material assistance from the Federal Government in the form of publications, fact sheets, and technical assistance. The central office staff, which began the planning and preparation of material in the early part of fiscal year 1959, will continue into 1960. The full year cost for these positions will require an additional \$37,198 in 1960.

Additional funds are included for 1960 amounting to \$83,544 to continue technical directors on a full year basis for whom funds are expected to be provided in 1959. These technical directors, located in several agencies of the Department of Health, Education, and Welfare, the Department of Labor, and the Housing and Home Finance Agency, will provide leadership and technical material in such areas as health, housing, employment, income maintenance, and education. In addition to these full time technical directors a number of additional directors will be employed on a part-time contractual basis in 1960 to develop background papers in connection with about eight other subject-matter areas. For these services, \$17,500 is requested.

New positions requested

Twenty-two additional positions are needed in 1960 for which \$183,233 is included in the budget estimate. Eighteen are to be located in the regional offices.

Four additional positions are being requested for the central White House Conference on Aging staff. Because so much material will be ready this year, three out of these four will be clerical positions to handle the typing, correspondence, and publication distribution workload and the many other details in connection with arrangements for the Conference. A professional position is needed to meet the demands of States, community and national organizations for consultation and conference participation, all of whom will be scheduling their final meetings in preparation for the White House Conference on Aging during this period. Increases are requested for both printing and reproduction and travel during 1960, since the provision of information and technical assistance to the States will be at its height during this year.

In order to be of maximum assistance to the States, the Department proposes to engage a specialist on aging for each of its nine regional offices, together with the clerical assistance. The specialists on aging will assist States in developing plans, surveys and conferences, act as resource personnel for local and State meetings, provide consultation to organizations working in the field, and assist in coordinating regional office services in aging.

The Director of the Special Staff on Aging is here and we are both available to answer any questions you may have.

Senator HILL. Mr. Kelly.

GENERAL PROVISIONS

Mr. KELLY. There are a few items in the general provisions and the effect of House action on which I would like to make a statement. To the extent that it was an adverse action, the request we make of the committee is for an adjustment.

Senator HILL. I think I have a pretty good idea of those items because I have been on the committee for some time. Senator Byrd and Senator Bible might wish you to indicate what items you are speaking about.

Mr. KELLY. The changes in the general provisions requested this year involved a broadening of the authority to make advance payments in connection with the procurement of publications that are available either at a reduced price or only available if you can make an advance payment.

The House has approved that request. Another provision extended the dates on availability of funds for construction to June 30, 1960, and the House approved that request. We did have a request before the committee and Dr. Derthick, the Commissioner of Education, spoke of it involving proposed language to use not to exceed \$5,000 for the entertainment of foreign officials. The House did not go along with that provision. They did not explain the reasons why. We do have such authority for the Surgeon General and the National Institutes of Health, but for the rest of the Department we do not. As you know, the East-West exchanges have built up to a point where a great many of our officials have to pay out of their own personal funds to provide entertainment for foreign officials similar to that provided us when we visit their countries. We have also requested authority to make grants from the National Institutes of Health to the Public Health Service hospitals and to St. Elizabeths Hospital. The House did not go along with that item, but we think it would be of material assistance to the hospitals if they could obtain that authority.

The last one was a limitation on the indirect cost of research. The House continued the 15 percent limitation.

Senator HILL.. That is on the medical area.

Mr. KELLY. Yes. We had requested that the limitation be removed but in the testimony before the House the Secretary said that if the budget was not amended above the \$294 million, that he would not utilize the authority to pay greater overhead, because he would not do this at the expense of decreasing the current level of research.

The budget as you know was not amended by the administration. The House did add \$50 million to the National Institutes of Health, but in accordance with the administration policy, the Secretary requested the removal of the increased funds. On the other hand, if the additional \$50 million were to be enacted, I am sure if he were here, he would testify of the desirability of utilizing a part of that increase for increased overhead, because this will in the long run further research at medical schools and the other institutions supported by these grants.

Senator HILL. Are there any questions, gentlemen? If not, thank you, Mr. Kelly.

Mr. KELLY. On behalf of the Secretary and other witnesses and on my own behalf, I would like to express our appreciation for the opportunity you have given us to explain our problems, programs, and budget, and you are most gracious and sympathetic to our programs. It is a real pleasure to appear before you.

Senator HILL. Thank you, sir. You have been appearing before this committee for how long?

Mr. KELLY. Five years.

Senator HILL. You have always been most helpful and given us a lot of useful and frank information, and have been fair with us, and most diligent. We want you to know that we are grateful to you. Thank you, sir.

Mr. KELLY. Thank you, sir.

Senator HILL. The committee will now stand in recess.

(Thereupon at 4:45 p.m., Monday, May 11, 1959, the committee recessed.)

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR 1960

MONDAY, MAY 18, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to call, in room 1318, New Senate Office Building, Hon. Lister Hill (chairman of the subcommittee) presiding.

Present: Senators Hill and Kuchel.

HEALTH SITUATION IN ALASKA

STATEMENT OF HON. E. L. BARTLETT, A U.S. SENATOR FROM THE STATE OF ALASKA

PROGRESS IN TUBERCULOSIS CONTROL

Senator HILL. The committee will kindly come to order.

Senator Bartlett, we are very happy to have you and Senator Gruening here with us this morning. We would be delighted to have you proceed in any way that you see fit.

Senator BARTLETT. Mr. Chairman and members of the committee, I have here a prepared statement. I shall not consume your time by reading all of it.

Senator HILL. We will put it in the record in full, Senator.

Senator BARTLETT. Fine. Thank you, sir.

I do want to express my appreciation from the people of Alaska to this committee for your helpful contributions over the years in the field of Alaska health.

I would like to give you some figures, which will demonstrate as nothing else could, how effective the health program in Alaska has been.

Since the Department of Health, Education, and Welfare took over from the Interior Department the administration of health in Alaska, the death rate from tuberculosis there has been cut by 63 percent. One person in 75, these being Alaska natives, people of Eskimo, Indian, and Aleut blood, was hospitalized for tuberculosis during the 1958 fiscal year, as compared with 1 in 30 hospitalized only 3 years earlier. It has been a dramatic accomplishment, one of the shining lights, in my opinion, of American medical history, and this has been made possible only by the appropriations which have come from this committee and the corresponding committee in the House.

ARCTIC HEALTH CENTER

Mr. Chairman, I should like to refer also to the work being done in the scientific field by the Arctic Health Research Center, which is an agency of the Department of Health, Education, and Welfare.

The budget request for this center for the next fiscal year is \$487,000. I should like to urge upon you the advisability of increasing that in the amount of at least \$60,000. If that is not done, two important sections of the center will have to be closed. Those are the sections having to do with bacteriology and physiology. They are important. In fact, in these days they are of perhaps vital importance in exploration of health and related matters in the Arctic and sub-Arctic.

We all know that across the Bering Strait the Soviet Government has settled millions of people in Siberia. Great cities have been established there in the last 20 years. The Russians have done ever so much more work in the scientific field in these geographic areas, we are told, than has the United States. Our explorations in these northern sections started only during World War II and have been continued quite largely since then under the auspices of this Arctic Health Research Center, which is located in Anchorage, and from which scientists go out all over Alaska in their various fields. And they have made some startling and useful discoveries in the areas which they have covered.

I have brought with me, Mr. Chairman and Senator, just a few of the publications probably eight inches high which have been written by members of the center's staff and which happen to be in my office. And this represents only a fraction of the publications which have been issued from that center. I have a very strong personal belief that the work of this center should be increased and not diminished.

CONSUMER PRICE INDEX FOR ALASKA

Now, one further subject I should like to present to you, with your permission, and that has to do with an appropriation for the Department of Labor which is not in the budget.

There is a very urgent need for \$175,000 for the next fiscal year for the establishment of a consumer price index for Alaska, to be performed in four of Alaska's cities. We have never had such an index established there. There have been some spot surveys in the past, but nothing of the character that is needed and rather urgently needed now. And I am informed that once this work has been performed, it can be carried on annually thereafter, at a cost of between \$20,000 and \$30,000. The time for doing this is now, I believe, and not in some future fiscal year.

In this connection, I should like to present, with my prepared statement, Mr. Chairman, Senate Joint Memorial No. 6 of the recent Alaska Legislature, the first session of the legislature of the 49th State, urging that such an index be established for Alaska.

Thank you very much.

QUESTION OF DEPARTMENTAL REQUESTS

Senator HILL. Senator, these questions perhaps should be addressed and could be better addressed to the respective departments. Do you know whether or not the Department of Health, Education, and Welfare requested the additional \$60,000?

Senator BARTLETT. My understanding, which is not sure, is that it did.

Senator HILL. Do you know whether or not the Labor Department requested the \$175,000 for the consumers' price index for Alaska?

Senator BARTLETT. I know that those in charge of this particular activity have been anxious for years to have such an index made, and I would suggest, without being able to offer you proof at the moment, that this was done.

Senator HILL. Any questions?

(The statement and memorial referred to follow:)

Mr. BARTLETT. Mr. Chairman, it has always been gratifying to Alaskans that this committee has displayed such sympathetic interest in the health needs of our Alaska Indians and Eskimos. Dramatic evidence of the assistance given since this function was transferred to the Department of Health, Education, and Welfare is borne out by the fact that since that time the death rate from tuberculosis has been cut 63 percent. It is my understanding that 1 in 75 Alaskan natives was hospitalized for tuberculosis during the 1958 fiscal year, as compared with the 1 in 30 hospitalized in the 1955 fiscal year. The incidence of this terrible disease is still high among our native people, but such tremendous strides have been taken that the pessimism felt early in the 1950's has turned to optimism that the magnificent achievements under this program will show even greater triumphs in the years ahead.

Another program of the Department is, in a different way, demonstrating its value in the scientific field. I speak now of the Arctic Health Research Center. The research performed there is of inestimable value, and it would be my hope that the committee would consider favorably an increase of at least \$60,000 in the budget request of \$487,000 for operation of the center so that the program may proceed without interruption during the next fiscal year. It is my understanding there has been no increase over the past few years, although costs have mounted by \$60,000 without expansion of the program itself. Without this increase, the bacteriology and physiology sections of the center will have to be eliminated. This, Alaska cannot afford. This, the Nation cannot afford.

We have barely started these important activities in the almost unknown scientific areas of the sub-Arctic and the Arctic. If anything, the work of these divisions should be increased rather than curtailed or entirely eliminated, as is now threatened. Across Bering Strait, the Communist Government is making great strides in settling the Arctic, as we were told again only recently in an instructive series of articles appearing in the New York Times. For military reasons, if for no other, the studies relating to bacteriology and physiology should proceed and, in the years immediately ahead, should be stepped up. Dr. James K. Shafer, Chief of the Division of General Health Services, has stated the budget of \$487,000, which has been essentially the same over the past 8 years, will have to be stretched to cover increased costs aside from the elimination of the two sections of research.

Mr. Chairman, it has been my great privilege to visit the center located at Anchorage, Alaska, and to see there some of the truly marvelous work being done by a group of dedicated scientists in research of health problems for low-temperature areas, and applying those studies to control of disease, waste disposal, water supply and housing, all in relation to health problems. The work performed has contributed to and answers to some of the research problems which have been adopted by the military, the health officials of Alaska and various communities and individuals. I do hope that the budget allowance of \$487,000 will be raised to at least \$547,000.

I am hopeful, too, that the committee might look with favor on an appropriation of \$367,000, which was eliminated before the budget came to the Hill, to initiate a much-needed new building for the center. This would be planning money for a building estimated to cost \$5,942,000. The value of this center and the work being done there cannot with accuracy be estimated except to say that the contributions are considered throughout the scientific world as invaluable. That work, I believe, should be continued undiminished.

Mr. Chairman, I turn now to appropriations for the Department of Labor and want to speak here in behalf of an appropriation of \$175,000, not in the budget, for the establishment of Consumer Prime Indexes for Alaska to be performed in four of Alaska's cities. There is truly an imperative need for inclusion of Alaska

in this program of the Bureau of Labor Statistics to establish a means to compare the cost-of-living in Alaska with other cities in the indexes, including Washington, D.C. There has been for several years a demand for such valuable data which can only be developed through the scientific processes adapted by the Bureau and applied alike to all cities in the surveys so that true comparisons can be made. As you know, of course, wage board negotiations both in private industry and the Federal Government, are based largely on the costs of living in a given area. It has always been my contention that in this field establishment in Alaska of an index by a recognized authority, as is the Bureau of Labor Statistics, would result in benefits to both management and labor.

Fourteen years have passed since any comprehensive Government survey has been made of Alaska's costs of living. And in that time, events have transpired which make it essential that Alaska be included in the Bureau of Labor Statistics program. Alaska has become a State. The economic and social changes which have occurred over the last decade and a half since that survey was made through a working agreement with the Office of Price Administration have been so tremendous that there is an imperative need to establish the Index, not only for labor-management negotiations but for information to assist the expansion of industry.

In 1951 and 1952 the Bureau of Labor Statistics performed so-called spot surveys in Anchorage, Fairbanks, and Ketchikan, but these skimmed the surface at best. With the funds available a comprehensive survey as really needed could not be performed as would be the case if the Consumer Price Index system were applied to Alaska. As you know, this index is respected throughout the country. If the \$175,000 is provided to initiate the program in Alaska, it is my understanding that consumer expenditure surveys of 200 to 250 families in each of 4 of Alaska's cities would be undertaken, based on the procedure followed in the cities now included in the index. After that, the yearly allotments to keep the index for Alaska up to date have been estimated at between \$20,000 and \$30,000. The need for surveys in four cities can well be demonstrated through citing here estimates of the differences ranging in Alaska in the cost of living. In January of this year, the Civil Service Commission estimated that the cost of living in Juneau was 37.7 percent higher than Washington, D.C., 54.2 percent higher in Anchorage, and 63.1 percent in Fairbanks.

These figures are estimates only but they demonstrate the variance in Alaska between population centers. It is to be remembered that Alaska is one-fifth the size of the entire other 48 States and, therefore, if an index were performed only in 1 Alaska city, it would not give the true picture which is vitally needed by Federal and local governments, and by private industry and labor.

The people of Alaska, who have for so long urged a true scientific survey for Alaska, have spoken again in favor of inclusion of Alaska in the index. That action was taken through their first State legislature when Senate Joint Memorial 6 was adopted. I should like to include that memorial in the record and to say that it is timely, it makes good sense, and to say that I urge endorsement of its contents through the appropriation of the desired \$175,000.

IN THE SENATE

By Senator Owen

SENATE JOINT MEMORIAL 6 IN THE LEGISLATURE OF THE STATE OF ALASKA, FIRST LEGISLATURE, FIRST SESSION

To the Honorable Dwight D. Eisenhower, President of the United States; the Honorable James P. Mitchell, Secretary of Labor; U.S. Senators from Alaska E. L. Bartlett and Ernest Gruening; and U.S. Representative Ralph J. Rivers:

Your Memorialist, the Legislature of the State of Alaska in First Session assembled, respectfully submits that:

The Bureau of Labor Statistics, U.S. Department of Labor, regularly publishes a cost-of-living index for 48 States and the Territory of Hawaii, but not including the State of Alaska;

The cost-of-living index as published by the Bureau of Labor Statistics is an official guide for the determination of wages to be paid employees working under union contracts and for wage board determinations for hourly Federal employees.

Provisions for the inclusion of the State of Alaska in the cost-of-living survey was not made by the President of the United States in the executive budget submitted to Congress through the Bureau of the Budget;

Therefore, the Legislature of the State of Alaska, in First Session assembled, requests that the President of the United States and the Secretary of Labor recommend to the Congress that the cost-of-living index survey be extended to the State of Alaska and that the necessary monies be provided therefor during the present session of the 86th Congress.

Passed by the Senate February 19, 1959.

/s/ WILLIAM E. BELTZ,
President of the Senate.

Attest:

/s/ KATHERINE T. ALEXANDER,
Secretary of the Senate.

Passed by the House February 23, 1959.

/s/ WARREN A. TAYLOR,
Speaker of the House.

Attest:

/s/ ESTHER REED,
Chief Clerk of the House.

I hereby certify that the above and foregoing constitutes a full, true and correct copy of Senate Joint Memorial No. 6 as passed by the Senate and House of Representatives of the State of Alaska.

/s/ KATHERINE T. ALEXANDER,
Secretary of the Senate.

Senator HILL. Senator Gruening, we will be happy to hear from you, sir.

HEALTH SITUATION IN ALASKA

STATEMENT OF HON. ERNEST GRUENING, A U.S. SENATOR FROM THE STATE OF ALASKA

GENERAL STATEMENT

Senator GRUENING. Mr. Chairman and members of the committee, I share the views of my able colleague on the very helpful assistance which this committee has rendered Alaska through the years. I would point out that for a great many years there was almost a total neglect of almost all health measures, and our incidence of tuberculosis, especially among the native population, rose and rose and rose, until finally, as a result of the interest of this committee and the corresponding committee of the House, we did get some appropriations with the very gratifying result that the incidence has been very sharply reduced. And of course it was not limited to the native population. Microbes are no respecters of race, creed, or color, and a great many other people were affected. We have made a very good start, and we would like to hold the advantages that we have gained and move forward.

I have a statement, which is not very long, and there are a few points in it which my colleague did not stress particularly, although he is as much concerned with them as I am. I would like to read this briefly.

PROGRAMS NEEDING ATTENTION

The three programs to which we want to call your attention are:
1. The Arctic Health Research Center, administered by the U.S. Public Health Service at Anchorage, Alaska.

2. The water pollution control program, also administered by the U.S. Public Health Service.

3. Consumer Price Index studies by the Bureau of Labor Statistics, to be made in selected Alaskan cities.

The value of each of these programs to the health, welfare, and economic development of the State of Alaska is very great. There is no question that each of them is significant, and, indeed, necessary to the continued development of our State.

However, the effectiveness of each of these programs will be tragically nullified if the Congress fails to appropriate the additional small amounts of money which are needed in the 1960 fiscal year.

I wish to stress the fact that very small sums, in addition to those amounts requested in the President's budget, are needed to insure the success of these programs.

For the Arctic Health Research Center I would ask an increase in appropriation of \$226,500.

For the water pollution control program, which is a beneficial program for the entire United States, an additional appropriation of \$25 million is needed.

For the Bureau of Labor Statistics, an additional \$175,000 is all that is needed to enable this agency to conduct studies necessary to develop consumer price indexes for Alaska.

In justification of these requests, I would like to make the following statement regarding the programs for which additional funds are needed:

ARCTIC HEALTH RESEARCH CENTER

It is apparent that there are unique conditions of living and health problems in low temperature areas which must be solved in order to attract population and establish an environment favorable to permanent settlement and economic development. The solution of these problems is dependent on the availability of funds to continue the highly specialized medical research which has been carried on by the Arctic Health Research Center since its establishment at Anchorage in 1948.

Among the specific problems of cold weather living which the center has studied in the past, and to the solution of which it has made significant contributions are the following:

1. Problems of water supply and environmental sanitation. In order to supply an arctic population with water and maintain sanitation facilities, it has been necessary to devise water supply systems which will enable water to flow constantly through permanently frozen ground. The engineers at the Arctic Health Research Center have successfully developed a single-main, recirculating water distribution system that has been working for more than 3 years in Fairbanks where temperatures are occasionally 50° below zero, maybe even lower, and installations are placed in permafrost.

2. Problems of biochemistry and disease peculiar to low temperature areas. The center has made considerable progress in the invention of measures to control nutritional deficiencies found to exist widely in these areas. It has also made extensive studies of the metabolism and body temperatures of arctic animals and of human beings in an arctic environment, producing information of great value in developing techniques to improve the adjustment of human beings to low temperatures.

3. Reduction of the incidence of tuberculosis among the indigenous population. Although this is not, necessarily, a problem peculiar to low temperature areas, the extremely high rate of tuberculosis among the native population has been an obstacle to full development of Alaskan resources. As a result of the work of the center, the mortality rate has been reduced from 765.1 per 100,000 in 1945 to 88.9 in 1956. This rate is still very high, and funds should be appropriated to the center to enable it to continue its valuable work on this problem.

ESTIMATE AND NEED OF HEALTH CENTER

The special projects of the health center, for which additional money is particularly needed in 1960 are the following:

1. Research to determine the feasibility of storage of water in earth impoundments for small communities and institutions in the Arctic where water supply in the form of liquid water is very difficult to provide during the winter months.

Estimate of cost for fiscal year 1960: \$75,000.

I should digress to say that in my visits around these Arctic villages, I have seen again and again that the only water supply comes from the very laborious and difficult method of going out and cutting up ice and then bringing it to their homes and melting it, with a waste of fuel and a good deal of elaborate effort, whereas this proposed alternative method of supplying water would be a substitute for this cumbersome and unhygienic method of securing water.

2. Research to develop operational criteria for septic tanks in Arctic regions to meet special problems of sludge accumulation peculiar to low temperature areas.

Estimate of cost for fiscal year 1960: \$50,000.

3. Research into the epidemiology and clinical characteristics of diseases of the conjunctivas and cornea which results in loss of vision among the indigenous population.

Estimate of cost for fiscal year 1960: \$46,200.

4. Research into the occurrence and nature of certain diseases peculiar to aboriginal groups of people in Arctic areas, such as anemia, parasitism, respiration diseases, and methemaglobinemia.

Estimate of cost for fiscal year 1960: \$29,000.

5. The coordination of Arctic health research with other programs of the Public Health Service.

Estimated cost for fiscal year 1960: \$26,300.

I have here detailed descriptions of each of the projects for which additional funds are being requested. I would ask that these descriptions be inserted in the record at this point in my remarks.

PREPARED STATEMENT

Senator HILL. We will be happy to have those descriptions inserted in the record at this point, Senator.

Senator GRUENING. Fine.

(The information referred to follows:)

PROJECT No. 1

JANUARY 30, 1959.

ARCTIC HEALTH RESEARCH CENTER—PROJECT DESCRIPTION, FISCAL YEAR 1960

PROJECT

Earth impoundments for Arctic water storage.

OBJECT

To determine feasibility of providing winter storage facilities for small communities and institutions in the Arctic by means of natural or artificial impoundments.

BACKGROUND

Water supply in the form of liquid water is very difficult to provide in the Arctic from the month of October to the month of May. Historically, the source of water during the wintermonths has been ice. Ice was harvested from the surface of lakes and rivers as soon as it reached a thickness appropriate for cutting, transport, and storage. In many instances, ice storage cellars or houses were constructed to store the ice for summer water supply also. In recent years, this method of water supply has been superseded by the use of wells where groundwater has been located under the permafrost. However, there are still many locations where ground water is either unavailable or is of such poor quality that elaborate and expensive treatment is required. The melting of ice for use as water also is expensive. Analysis of operations at a remote hospital has shown a cost of approximately \$37 per 1,000 gallons when cutting, hauling, storing, handling, and melting are considered.

A possible alternative to these procedures is the storage of water during the late summer in a sufficiently large quantity to provide a supply until the following summer months when surface supplies again become available. This practice has been followed on a limited scale at some of the remote native schools and on a larger scale at some of the DEW line installations. However, these installations have consisted of wooden or steel tanks protected from the weather by insulation or by a building. This method results in a high cost per gallon of water stored.

A further alternative to this method would be accomplished through provision of reservoirs in the earth formed by diked embankments sealed with a watertight membrane of plastic or asphalt where necessary. Ice has been used as an insulating cover over small water storage reservoirs in the Northern States, and additional study of this method might enable the use of large open reservoirs in the Arctic.

Heat could be provided in the storage reservoir by means of a heat exchanger system submerged in the reservoir. Experimentation with this method on a small scale was begun in the summer of 1958, with the construction of two experimental storage reservoirs suitable for small native villages with populations of 200 people. Operational tests are being conducted during the winter of 1958-59.

This preliminary work should be extended by basic studies on heat transfer and losses from natural ponds. The ultimate objective of such studies is to develop methods by which natural and artificial ponds can be utilized for water storage under Arctic conditions.

PLAN OF WORK

A series of observations on temperature gradients in and around three natural ponds and two artificial ponds will be started. These ponds will be approximately 100 feet in diameter. The natural ponds probably will be selected on the basis of differences in depth. If possible, it would be desirable for the initial observations to utilize ponds in the middle latitudes of Alaska rather than in the extreme northern points. For artificial ponds, it is planned to utilize existing waste stabilization ponds. It will be desirable to install flow recording equipment and temperature recording equipment at the site of the artificial ponds to reduce the number of man-hours required to obtain measurements at locations where electric power is available.

Core specimens of the soil under and adjacent to all ponds will be obtained and analyzed to determine the conductivity constant for heat transfer.

Using the temperature gradient measurements and the soil conductivity factors, the pattern of heat flow from the ponds will be computed for the sides and bottom surfaces.

Measurements of the total heat content of samples of water from the pond will be made periodically by means of a portable calorimeter.

Using the data obtained from the measurements described, a heat exchange system will be designed for one natural pond and for one artificial pond. This heating system will be installed during the summer following the winter observations. Additional heat control techniques will be provided through the use of drifted snow on the ice surface or through layers of straw, either of which would serve as insulation and as a means of lessening the rate of heat transfer through the top surface.

The experience gained in experimenting with these small ponds will provide basic data for the design of natural storage reservoirs for water storage on a large scale.

Estimate of cost: \$75,000 for the 1960 fiscal year.

PROJECT No. 2

JANUARY 30, 1959.

ARCTIC HEALTH RESEARCH CENTER—PROJECT DESCRIPTION, FISCAL YEAR 1960

PROJECT

Operational criteria for septic tanks in Alaska (Fairbanks and Anchorage areas).

OBJECT

To develop a guide for the operation of septic tanks and tile fields in Alaska.

BACKGROUND

The Arctic Health Research Center has been instrumental in introducing the use of septic tanks and tile fields in central and south central Alaska. A small number of septic tanks and tile disposal fields have been in operation in the vicinity of Anchorage and Fairbanks for several years.

Exploratory studies during fiscal year 1958 and 1959 indicate that accumulation of sludge occurs at a more rapid rate in these low temperature areas than it does in temperate zones. A thorough study of the load conditions and associated rate of sludge accumulation is very evidently needed to develop recommendations for tank cleaning schedules.

PLAN OF WORK

It is planned to utilize existing private systems to save the cost of construction of test facilities. Approximately 20 households served by septic tanks and tile fields can be selected in the Anchorage and Fairbanks areas. The selection of these will be made such that about equal numbers will be located in Fairbanks and in Anchorage.

During the summer of 1959, arrangements and negotiations will be made with the property owners for:

1. Installation of temperature-measuring equipment.
2. Modifications in tank construction for the collection of sludge samples.
3. Installation of water meters for measurement of liquid wastes deposited in the tank system.

Upon completion of the field installations, which should be by October 1959, a schedule will be established for the monthly collection of samples, weekly measurements of temperatures, and the weekly recording of water consumption. The indicated measurements will be carried out on schedule, and samples will be sent to the sanitary engineering laboratory for analysis. Data will be tabulated and plotted as it is obtained. Chemical laboratory analyses of sewage sludge will be obtained concurrently with temperature and flow measurements. The condition of the tile disposal trench will be examined by excavating pits to the depth of the trench prior to fall freezeup and after the spring thaw.

From 2 to 3 years will be required for completion of the study, analysis of data, and formulation of operational guides.

Estimate of cost: \$50,000 for the 1960 fiscal year.

PROJECT No. 3

ARCTIC HEALTH RESEARCH CENTER—RESEARCH PROJECT DESCRIPTION, FISCAL YEAR 1960

PROJECT

Epidemiological studies.

OBJECT

Investigate epidemiological and clinical characteristics of phlyectenular keratoconjunctivities; and also other factors of illness among Alaskans.

BACKGROUND

Among the aborigines of Alaska and other Arctic and subarctic areas of the world a disease of the conjunctivae and cornea results in great loss of vision by corneal scarification. Prevailing theory is that PKC is an allergic response to toxic products of the tubercle bacillus. It is true that a common relationship is found between tuberculosis and PKC among populations with very high prevalence of tuberculosis. Other theories consider vitamin deficiency, trauma of smoke and actinic rays as casual factors.

Surveys of school age children have shown loss of visual acuity due to corneal opacities in as much as 20 percent in some groups. In September 1958, examination of all age groups in an Eskimo village showed above 30 percent with corneal opacities.

Season and age of occurrence and of recrudescence are not well known. Relationship to environmental and cultural factors are not known. Differential diagnosis of opacities is not known. Treatment of acute phases is rather effective in prevention of opacities. However, treatment is generally done by lay persons and on an empirical basis.

Beginning in fiscal year 1959, field epidemiological observations will determine prevalence and distribution of opacities among residents of 24 villages already under study for prophylaxis of tuberculosis. Demographic information is available and census is current.

In cooperation with the Institute of Neurological Diseases and Blindness a clinical-epidemiological study will begin. The medical officer is being recruited for training before assignment.

ESTIMATED COST AND PERSONNEL

The five persons listed below include a staff now carrying on studies supported largely through reimbursement. The statistician GS-11, and one statistical clerk GS-4b, are new.

It is essential to stability of the center that basic staff be supported by our basic appropriation.

Cost (annual) :

Personal services-----	\$33, 800
Travel -----	6, 300
Other -----	6, 100
Total-----	46, 200

Personnel :

- 1 medical director, chief.
- 1 epidemiologist, nurse officer.
- 1 statistician, GS-11.
- 1 statistical clerk, GS-4b.
- 1 clerk-typist, GS-4b.

PROJECT No. 4

ARCTIC HEALTH RESEARCH CENTER—RESEARCH PROJECT DESCRIPTION, FISCAL YEAR 1960

PROJECT

Clinical investigations.

OBJECT

To study occurrence and nature of certain diseases in low-temperature areas.

BACKGROUND

Geography and climate have combined in Alaska to preserve aboriginal groups of people whose cultural and genetic character offer opportunity to observe unusual occurrence of disease, or, the absence of disease. Quite extensive sampling, for example, has failed to uncover new cases of diabetes mellitus. Among Eskimos age 35 and over. Conversely, rare disease, methemaglobinemia has been found with fair frequency.

Dietary of certain groups still is sufficiently distinctive, simple and limited to make possible determinations of relationships that may exist between diet and disease, or perhaps to establish minimum effective nutritional requirements of certain dietary constituents.

Under another bureau of the Public Health Service are being treated daily scores of these aborigines. Much, surely, can be learned from an organized effort to standardize observations in certain clinical areas, and to tabulate results. Coronary heart disease is a prime example.

WORK PLAN

A physician qualified in internal medicine, will be employed and assigned to the medical staff of the PHS Hospital, Anchorage, a 400-bed general hospital. Time will be divided between the hospital, the research center, and the field. Medical records clerical assistance will be provided for records review and tabulation.

Almost daily contact is maintained with research investigators of Arctic Health Research Center thus creating an invaluable liaison between clinical and laboratory interests.

This arrangement has worked well in other research-medical care situations, and worked well here for 2 years, while Arctic Health Research Center was able to maintain support on a reimbursable arrangement no longer available.

Studies of heart disease advanced to a gratifying degree, when they were discontinued due to loss of support.

ESTIMATED COST AND PERSONNEL

Cost, 1st year, \$29,000.

Clinician, Medical Director grade-----	\$15, 800
Medical Records Clerk, GS-4a-----	4, 800
Subtotal-----	20, 600
Travel-----	3, 000
Other-----	5, 400
Total-----	29, 000

PROJECT No. 5

ARCTIC HEALTH RESEARCH CENTER—RESEARCH PROJECT DESCRIPTION, FISCAL YEAR 1960

PROJECT

Coordination of Arctic Health Research.

OBJECT

Implement the provision of part 12-12 of the B.S.S. Policy and Procedure Manual which established the position of Assistant Director (Research).

BACKGROUND

The Arctic Health Research Center is a specialized research facility available to assist and collaborate with all of the other research units of the Public Health Service. It is specialized in that it is concerned with the unique problems and conditions in low-temperature areas but it is at the same time broadly generalized in that it is concerned with all aspects of its speciality which necessitates not

only close internal coordination but also effective coordination with other research and operating units of the service.

This position will provide direction, leadership, and coordination to the research activities at the center. The Assistant Director will be specifically responsible for planning, stimulating, and coordinating the total AHRC research program; for generally directing and guiding the conduct of all AHRC scientific research activities; and for developing and facilitating relationships with scientific and research groups outside the center.

ESTIMATED COST AND PERSONNEL

This is a new position and will require clerical support and travel.

Cost :

Personal services-----	\$17, 100
Travel-----	5, 200
Other-----	4, 000
Total-----	26, 300

Personnel :

- 1 Research Director, Science Director.
- 1 Clerk-typist, GS-4b.

U.S. LAG IN DEVELOPMENT

Senator GRUENING. I would say that the United States has lagged behind the other nations of the world in developing Arctic and sub-Arctic areas under Government control.

For some years before World War II, Russia, Finland, and the other Scandinavian countries were actively colonizing their Arctic holdings. Of the four nations possessing vast arctic areas, Russia has been the indisputable leader in their dynamic development. The world's largest city north of the Arctic Circle is Murmansk; and other large communities north of 60 degree latitude in Russia include Archangel and Yakutsk. There is clear evidence that U.S.S.R. Arctic research in several disciplines has long been extensive and will continue to be emphasized through 10 new research institutes in Siberia, one of which will deal with biology and medical sciences.

VALUE OF ARCTIC HEALTH CENTER

The Arctic Health Research Center in Anchorage represents the foremost source of scientific investigation of Arctic health conditions in the United States. In this area, as in all other areas of scientific endeavor, it is important for the United States to keep pace with the Soviet Union. The appropriation of \$226,500 to the Arctic Health Research Center will be a significant contribution toward American development of low-temperature regions under the United States flag, which in view of Russian activity in Siberia is increasingly important.

With the permission of the committee, I will skip the following paragraphs, related to water pollution control.

Senator HILL. That will appear in the record in full, Senator.

(The statement referred to follows:)

Mr. Chairman and members of the committee, I wish to thank this distinguished committee for giving me this opportunity to appear before you for the purpose of urging favorable action on appropriations for three activities which I believe to be of exceptional importance to the State of Alaska, as well as to the United States as a whole.

The three programs which I wish to bring to your attention are :

- 1. The Arctic Health Research Center, administered by the U.S. Public Health Service at Anchorage, Alaska.

2. The water pollution control program, also administered by the U.S. Public Health Service.

3. Consumer Price Index studies by the Bureau of Labor Statistics, to be made in selected Alaskan cities.

The value of each of these programs to the health, welfare and economic development of the State of Alaska is very great. There is no question that each of them is significant, and, indeed, necessary to the continued development of our State.

However, the effectiveness of each of these programs will be tragically nullified if the Congress fails to appropriate the additional small amounts of money which are needed in the 1960 fiscal year.

I wish to stress the fact that very small sums, in addition to those amounts requested in the President's budget, are needed to insure the success of these programs.

For the Arctic Health Research Center I would ask an increase in appropriation of \$226,500.

For the water pollution control program, which is a beneficial program for the entire United States, an additional appropriation of \$25 million is needed.

For the Bureau of Labor Statistics, an additional \$175,000 is all that is needed to enable this agency to conduct studies necessary to develop consumer price indexes for Alaska.

In justification of these requests, I would like to make the following statement regarding the programs for which additional funds are needed:

THE ARCTIC HEALTH RESEARCH CENTER

It is apparent that there are unique conditions of living and health problems in low temperature areas which must be solved in order to attract population and establish an environment favorable to permanent settlement and economic development. The solution of these problems is dependent on the availability of funds to continue the highly specialized medical research which has been carried on by the Arctic Health Research Center since its establishment at Anchorage in 1948.

Among the specific problems of cold-weather living which the center has studied in the past, and to the solution of which it has made significant contributions are the following:

1. *Problems of water supply and environmental sanitation.*—In order to supply an Arctic population with water and maintain sanitation facilities, it has been necessary to devise water supply systems which will enable water to flow constantly through permanently frozen ground. The engineers at the Arctic Health Research Center have successfully developed a single-main, recirculating water distribution system that has been working for more than 3 years in Fairbanks, where temperatures are often 50 degrees below zero and installations are placed in permafrost.

2. *Problems of biochemistry and disease peculiar to low temperature areas.*—The center has made considerable progress in the invention of measures to control nutritional deficiencies found to exist widely in these areas. It has also made extensive studies of the metabolism and body temperatures of arctic animals and of human beings in an arctic environment, producing information of great value in developing techniques to improve the adjustment of human beings to low temperatures.

3. *Reduction of the incidence of tuberculosis among the indigenous population.*—Although this is not, necessarily, a problem peculiar to low-temperature areas, the extremely high rate of tuberculosis among the native population has been an obstacle to full development of Alaskan resources. As a result of the work of the center, the mortality rate has been reduced from 765.1 per 100,000 in 1945 to 88.9 in 1956. This rate is still very high, and funds should be appropriated to the center to enable it to continue its valuable work on this problem.

The special projects of the health center, for which additional money is particularly needed in 1960 are the following:

1. Research to determine the feasibility of storage of water in earth impoundments for small communities and institutions in the Arctic where water supply in the form of liquid water is very difficult to provide during the winter months.

Estimate of cost for fiscal year 1960: \$75,000.

2. Research to develop operational criteria for septic tanks in arctic regions to meet special problems of sludge accumulation peculiar to low-temperature areas.

Estimate of cost for fiscal year 1960: \$50,000.

3. Research into the epidemiology and clinical characteristics of diseases of the conjunctivae and cornea which results in loss of vision among the indigenous population.

Estimate of cost for fiscal year 1960: \$46,200.

4. Research into the occurrence and nature of certain diseases peculiar to aboriginal groups of people in arctic areas, such as anemia, parasitism, respiratory diseases and methemoglobinemia.

Estimate of cost for fiscal year 1960: \$29,000.

5. The coordination of arctic health research with other programs of the Public Health Service.

Estimated cost for fiscal year 1960: \$26,300.

I have here detailed descriptions of each of the projects for which additional funds are being requested. I would ask that these descriptions be inserted in the record at this point in my remarks.

The United States has lagged behind the other nations of the world in developing arctic and subarctic areas under its governmental control. For some years before World War II, Russia, Finland, and the other Scandinavian countries were actively colonizing their arctic holdings. Of the four nations possessing vast arctic areas, Russia has been the indisputable leader in their forceful development. The world's largest city north of the Arctic Circle is Murmansk; and other large communities north of 60 degree latitude in Russia include Archangel and Yakutsk. There is clear evidence that U.S.S.R. arctic research in several disciplines has long been extensive and will continue to be emphasized through 10 new research institutes in Siberia, 1 of which will deal with biology and medical sciences.

The Arctic Health Research Center in Anchorage represents the foremost source of scientific investigation of arctic health conditions in the United States. In this area, as in all other areas of scientific endeavor, it is important for the United States to keep pace with the Soviet Union. The appropriation of \$226,500 to the Arctic Health Research Center will be a significant contribution toward American development of low-temperature regions under the U.S. flag, which in view of Russian activity in Siberia is increasingly important.

WATER POLLUTION CONTROL

One of the most important programs administered by the U.S. Public Health Service is the water pollution control program. This program is of greatest importance to every community in the United States.

In Alaska, its importance is especially great, in view of the peculiar problems of environmental sanitation to which reference was made earlier in discussing the program of the Arctic Health Research Center. With a growing population, and advancing industrialization, the control of water pollution will be a more and more important concern for Alaska, as it is for all the other States.

For 1959, the appropriation for that phase of the water pollution control program under which grants are made to the States for the construction of sewage treatment facilities was \$45 million. For 1960, the administration has requested only \$20 million, an amount which is so small as to be completely unrealistic. To maintain the health of all our communities in all our States it is of greatest importance that the appropriation for this program for 1960 be at least as large as that for 1959. I respectfully urge that the appropriation for the grant program for sewage treatment facilities be made at the same level as in 1959—that is, \$45 million.

BUREAU OF LABOR STATISTICS—DEVELOPMENT OF CONSUMER PRICE INDEXES FOR ALASKA

I am requesting that an additional \$175,000 be appropriated to the Bureau of Labor Statistics of the Department of Labor for the purpose of establishing consumer price indexes for representative Alaskan cities.

The Bureau of Labor Statistics is responsible for providing adequate cost of living data for urban workers and their families. This has been done for other States in the United States, but it has never been performed on a continuing basis for the Territories.

In Alaska there has been no comprehensive consumer price study in any city since 1945.

As a result, the Government and private business firms are handicapped by a lack of reliable economic data which is needed for such purposes as labor-management negotiations and for industrial location and plant expansion programs.

It is well known that the cost of living in Alaska is high. Accurate data are badly needed to determine the degree to which living costs are greater there than in other States. Consumer price indexes provide an important statistical tool for which the need is felt at this time. I urge the appropriation of the funds which will make this information available to those who require it.

Thank you very much for giving me this opportunity to appear on behalf of these important programs.

ESTIMATE OF CONSUMER INDEX

Senator GRUENING. And I will merely conclude with a statement supplementing that of my able colleague on the importance of the appropriation for the Bureau of Labor Statistics, so that it can estimate prices and costs of living in Alaska. A total of \$175,000 is involved.

Now Alaska is the only State as to which, because this was not requested, these cost-of-living studies will not be made. As a Territory we were denied them. It is particularly important that they now be made in Alaska, because for a variety of reasons it is essential that at this point we have the facts. Our cost of living is excessive. To work to reduce it we must have the facts annually and this appropriation will merely put us on a par with the other 48 States.

I want to thank the committee very much for its courtesy in hearing me.

Senator HILL. I may say, Senator, in reference to the questions that I asked Senator Bartlett, an examination of the record reveals that the Department of Health, Education, and Welfare requested of the Budget for the Arctic Health Research \$209,600, which were not granted by the Budget. That is in line with one of the questions I asked Senator Bartlett. So we will put that in the record, with a breakdown of the \$209,600 as requested by the Department.

Senator GRUENING. Well, it seems tragic to me that a going program, an excellent program, the only program of its kind, one that holds so much good, should be crippled and stopped for want of a relatively small appropriation. These are modest sums which we request. There is a fine group of scientists up there, dedicated people, working on these problems, and the solution will be of benefit not merely to Alaska as such but to the whole United States, because our Arctic development is a matter of national import. So I hope the committee will see fit to recommend these small sums.

Senator HILL. Senators, we certainly want to thank you very much for your testimony and your participation here this morning. We appreciate it very much.

Senator HILL. Delegate Burns of Hawaii?

We are happy to have you here, sir, and we will be happy to have you proceed in your own way and make any statement you see fit, sir.

FUNDS FOR CARE OF LEPROSY VICTIMS

STATEMENT OF HON. JOHN A. BURNS, A DELEGATE IN CONGRESS
FROM HAWAII

GENERAL STATEMENT

Delegate BURNS. Mr. Chairman, I have a prepared statement I would like to present to the committee, if I may.

Senator HILL. All right, sir. We will have it appear in full in the record, sir.

Delegate BURNS. Mr. Chairman, my name is John A. Burns. It is my privilege to represent Hawaii as Delegate in the Congress of the United States. This opportunity to present to you a request for the addition of \$200,000 for payment to Hawaii for care and treatment of persons afflicted with leprosy is deeply appreciated.

By the terms of Public Law 411, 82d Congress, title 42, U.S.C. 255 was amended so as to authorize and direct the Surgeon General to make payments to the Territorial Board of Health for the care and treatment in its facilities of persons afflicted with leprosy.

In accordance with this amendment, the Congress has appropriated the sum of \$1 million per annum for the care and treatment of persons afflicted with leprosy (Hansen's disease). This amount has been \$209,241 per annum less than the expenditures of the Territory of Hawaii for the biennium 1957-59. For the biennium 1959-61, the amount is \$203,190.50 less than Hawaii's expenditures for this care and treatment.

Mr. Chairman, may I point out that according to appropriate Federal law, the Public Health Service shall receive into any hospital of the Service suitable for his accommodation any person afflicted with leprosy, who presents himself for care, detention, or treatment, or who may be apprehended under provisions or authority granted by law, and any person afflicted with leprosy duly consigned to the care of the Service by the proper health authority of any State, Territory, or the District of Columbia. Transportation is also provided for such person to the appropriate hospital for detention treatment. The Federal Government maintains a National Leprosarium in Carville, La.

Hawaii is, therefore, in a small measure benefiting the Federal Government by maintaining a Hansen's disease program for the care and treatment of persons afflicted with this disease.

It should be pointed out that Hawaii's Kalaupapa Settlement was made famous by Father Damien and that the program is a long-standing one in Hawaii. Considerable amounts of money are spent by Hawaii in connection with capital outlays.

REASON FOR TYPE OF REQUEST

Mr. Chairman, I present this request for additional inclusion in the budget in this manner after efforts to have the same included as presented by the administration.

The Federal deficiency first came to my attention the latter part of 1957. Having verified the figures with Dr. Richard K. C. Lee, president of the Board of Health, Territory of Hawaii, I wrote to the then

Secretary Marion B. Folsom, Department of Health, Education, and Welfare, directing his attention to the deficiencies.

Secretary Folsom informed me on December 26, 1957, that my letter had arrived too late for consideration in the development of the formal budget for the 1958 fiscal year. I was also advised by the Secretary that since the Federal Government's participation in Hawaii's leprosy program was now in its seventh year, the time had come for a reevaluation. A staff study was promised.

On August 20, 1958, a little less than a year later, having received no indication as to the promise of the staff study, I wrote to Secretary Arthur S. Flemming, Department of Health, Education, and Welfare, advising him of my original letter and of former Secretary Folsom's commitment on a staff study.

On September 6, 1958, I received a reply from Secretary Flemming advising me that the staff study had been completed and that its results showed that Federal payments fell short of covering costs by about the amount indicated in my letter, which was a minimum of \$200,000. I was advised that as of that date, September 6, 1958, the need was under consideration for inclusion in the President's estimate for 1960.

Having been occupied completely with passage of a most important bill to the Nation and to my constituents, I failed to note the hearings on the budget for the Department of Health, Education, and Welfare in the House of Representatives until the matter was reported to the House.

RESTORATION REQUESTED

I then learned, by reading the bill, that the amount recommended for appropriation was \$1 million instead of \$1,200,000.

I therefore respectfully request that the committee change the figure upward from \$1 million to \$1,200,000. This will not in any way make up for sums we are already out of pocket, but it will prevent an injustice from being continued.

I appreciate your consideration in affording me this opportunity to present this matter to you. I do hope that your decision will be favorable.

DEPARTMENTAL REQUEST

Senator HILL. Mr. Burns, I note that the Department of Health, Education, and Welfare requested the \$200,000 from the budget. In other words, they made the request that the \$200,000 be included in the President's budget. But the \$200,000 was denied by the budget. That is, they declined to include the \$200,000 in the budget. But the Department did make the request supporting your position in the matter.

Delegate BURNS. That is correct, sir. I am happy to know that.

Senator HILL. The official record shows that.

Delegate BURNS. I am happy to see that the Department agrees with my position.

Senator HILL. They do. The record shows that, sir.

We want to thank you very much for your appearance here this morning. We appreciate your attendance.

Delegate BURNS. Thank you, sir.

Senator HILL. Has Congressman Stratton come in yet?

We will hear from our friends of the American Dental Association, Dr. Nagle, Dr. Camalier, and Mr. Christensen.

Gentlemen, we are very happy to have you here this morning, and we will be delighted now to have you proceed in your own way.

Do you want to put the full text of your statement in the record?

AMERICAN DENTAL ASSOCIATION

STATEMENTS OF DR. RAYMOND J. NAGLE, DR. C. WILLARD CAMALIER, AND HAL M. CHRISTENSEN, REPRESENTATIVES

PREPARED STATEMENT

Dr. NAGLE. If you please, sir. I have a summary, which will be brief.

Senator HILL. All right. We will put your full statement in the record at this point.

(The statement referred to follows.)

I am Dr. Raymond J. Nagle, dean of the College of Dentistry, of New York University. I am also a member of the American Dental Association's Council on Dental Education and president-elect of the American Association of Dental Schools. I am accompanied by Dr. C. Willard Camalier, assistant secretary of the American Dental Association and Mr. Hal M. Christensen, assistant secretary of the Association's Council on Legislation.

We are here today to present the association's views and recommendations concerning fiscal 1960 appropriations for the dental health activities of the Public Health Service.

The American Dental Association recommends that the appropriations contained in H.R. 6769 for dental health activities of the Public Health Service be increased from \$9,725,000 to \$10,164,000, an increase of \$439,000 to be apportioned as follows:

Training grants.....	\$150, 000
Research fellowships.....	223, 000
Direct research at NIDR.....	66, 000
Total.....	439, 000

The amount recommended in the House bill apparently is based upon an amended budget submitted by the Public Health Service to the House Appropriation's Subcommittee which allocates increases of \$350,000 for training, \$77,000 for fellowships, and \$144,000 for direct NIDR research operations.

The amounts recommended by the association would bring the increases for these three programs to a more adequate level of \$500,000, \$300,000, and \$200,000 respectively.

The total appropriations for fiscal 1960 would then be \$10,164,000, an increase of \$2,744,000 over the amount appropriated for 1959.

In this year marking the 100th anniversary of the founding of the American Dental Association, the dental profession looks with pride upon the achievements that have been made in improving the dental health of the people and the inroads that are being made into the causes of dental diseases and the means of preventing them.

Much of the progress being made is due to the forward-looking and constructive decisions that have been made by this committee in support of dental research.

On behalf of the 90,000 members of the American Dental Association, I wish especially to express appreciation for this committee's tireless leadership and support in providing for the establishment of a building for the National Institute of Dental Research. As you know, actual construction of the building will be undertaken this year, climaxing more than 10 years of efforts and, in this the association's centennial year, constituting a fitting and monumental tribute to a century of progress in dental health.

The organized dental profession has a deep interest in assuring continuation of the dental research program that is now producing more and more advances

toward effective control of dental diseases. Later on in this testimony, we will detail some of the achievements and plans for the continued progress of the program of the National Institute of Dental Research.

However, in passing, it should be pointed out that despite the significant progress that has been made, much more remains to be done. While research is contributing immeasurably to the reduction and control of oral disease, there are several additional problem areas in dental health that are needful of attention.

Population growth continues to run ahead of treatment capacity and more dentists are required than are available to meet the existing need for care. Unless provision is made to increase the facilities for training additional dentists, this condition will continue and worsen. Some action to relieve this situation should be taken.

This association has supported appropriations to implement the Health Research Facilities Act and seriously questions the proposal that funds for that program be cut back from \$30 million to \$20 million. However the prime need in the dental area is for financial assistance for construction, remodeling and expansion of teaching facilities. Our job is to train more dentists and to do this priority must be given to programs designed to assist the establishment of new dental schools and the expansion of existing ones. In fact, because of the shortage of teaching facilities, most dental schools are unable to take advantage of the Research Facilities Act; the funds that are available must be conserved to meet the more critical need. It is recommended that the members of this committee give attention to this serious problem.

In passing, also, the association would like to point out the need for adequate funds to enable the Food and Drug Administration effectively to enforce the laws within its jurisdiction. The association has no specific recommendation to make on this subject, but it is believed strongly that every precaution should be taken to assure that the American public is protected against the sale and distribution of products that are harmful to health and also against false and misleading claims as to the therapeutic value of many drugs and other products offered for sale to the public.

PROGRESS IN DENTAL STORAGE

The past year has been productive and rewarding in the field of dental research, both in terms of significant research findings and intensification of activity and interest. The program of the National Institute of Dental Research, including both intramural and extramural research is progressing steadily, contributing significant new information and understanding of the causes of oral disease and the relationship of oral disease to general health.

Nearly 330 research projects are underway in the Nation's dental schools and other scientific institutions, representing a moderate but healthy growth of about 35 projects over last year. Virtually all dental schools are now participating in the research program.

This broadening of the basic research endeavor has had many extremely beneficial aspects. The increased opportunity for students to participate in and conduct research and the resultant improvement in the quality of their training is almost as important as the research findings that are being produced. Future generations of Americans will reap the benefits of less dental disease and better care and treatment as a result of these efforts.

As the program has begun to come into its own, there has been a marked and heartening advance in general appreciation not only for the significance of dental disease as a serious and widespread health problem, but also for its importance as a contributing and sometimes causative factor in many systemic disorders.

Many of the findings that are being made by dental researchers have definite relationship and application to other scientific investigations. This is especially true of the studies that are being made in the areas of dental genetics, oral diagnosis, and bacteriological studies, including experiments with germ-free animals. Dental research, too, is making contributions in providing knowledge to enable the human race to cope with the problems brought on by the development of nuclear energy.

These and other significant developments are described in a later part of this statement; they are referred to here to indicate that while emphasis in dental research is, of course, on the diseases of the oral cavity, there is a broad area of direct interrelation with other medical research and with health problems in addition to oral disease.

The prime objective of the dental research program continues to be toward the prevention of dental disease. Dental caries, which afflicts all but 5 percent of the total population, is a disease that can be brought under effective control only through preventive means. The high incidence of the disease has long been outrunning the efforts to arrest it through conventional treatment—and this despite the fact that this country has the world's most advanced and efficient techniques and best-trained personnel for providing dental care to the people. Even with the advent of fluoridation which is now being furnished to nearly 35 million people, and will reduce the incidence of caries in children by 60 to 65 percent, the estimated capacity for treating the people in need of care will not, in the foreseeable future, be sufficient to meet the load. Even under the most optimistic plans for increasing dental school enrollments and the number of dental schools, it is clear that population growth and increasing demand for care will continue to outdistance treatment capacity unless additional preventive measures are discovered. We are confident that such measures will be found eventually through dental research.

To assure attainment of the desired objective, it is essential that the orderly but progressive expansion toward the full capacity of our dental research potential be continued.

At the present time, there is a need for a moderate increase in financial support for nongovernmental research projects. Many extremely promising investigations need to be expanded and a number of new studies should be initiated.

Similarly, there is a need for increased activity and some concentration and specialization within the National Institute of Dental Research.

The number of adequately trained and qualified scientific investigators and teachers is too low. It is essential that the training grants and fellowship programs be augmented to assist in providing the technical personnel needed to carry on and improve the overall research effort.

PROJECT GRANTS PROGRAM

As indicated above, there are now about 330 NIH-supported research projects underway in the dental schools and other research institutions throughout the country. Many of these are of several years' duration, and, to assure best results and make the most economical use of available funds, they must be continued to completion.

It is conservatively estimated that about \$3 million will be needed during fiscal 1960 to continue the essential investigations that are underway but have not been completed. If 1960 appropriations are kept at the present level, there will be only about \$400,000 to activate new projects that have been applied for and will have been approved but not paid before the end of the current fiscal year. This might well preclude entirely any consideration of new applications for grants during the next year since by the end of this fiscal year, there will be approved but unpaid grants amounting to well over \$1 million.

Put another way, before the end of the present fiscal year about 100 projects representing a need for more than \$1 million will have been approved but not paid because of lack of funds in the fiscal 1959 budget.

Of the approximately 115 projects that should be activated next year, 80 to 90 will have to be turned down for lack of funds. This large number of grants which will be approved is made up of those that have undergone and survived the intensive and critical screening and evaluating process to which all applications are subjected. This association believes that the rejection of this large number of worthy applications while the program is yet in the beginning stages would be extremely unwise and might constitute a deterrent or discouragement to the future participation of our research institutions in the program. Accordingly, the association recommends that the budget item for the project grants be increased by approximately \$1 million. This will permit initiation of several important new investigations and permit continuation and extension of essential projects such as those outlined in the following pages.

Germ-free animal experiments.—The promising work being done with germ-free animals should be continued and expanded. The techniques used in these experiments provides an excellent method for studying the causes of many diseases. Dental research workers have found that germ-free rats did not develop dental decay when fed diets that produced severe decay in animals reared under normal conditions. Moreover, when bacteria were introduced into the germ-free colonies, decay appeared very quickly. By introducing individual

strains of bacteria, investigators have begun to pinpoint the specific germs that cause decay. Eventually, the studies of germ combinations that produce decay in animals can be extended to investigate combinations that tend to prevent decay. This fascinating problem already is being investigated in pilot studies of human subjects. Much more intensive use of the germ-free animal technique is required both at NIDR and at private institutions.

Bacterial antagonisms for decay prevention.—Other bacterial studies are providing promising results in the fight against oral disease. Some years ago research disclosed that the millions of bacteria in the mouth are in a constant state of war with each other. Dental scientists are now making attempts to turn these bacterial antagonisms to the benefit of mankind, and they are obtaining some encouraging findings. In work which will be reported shortly, the scientists inoculated decay-susceptible individuals by painting their teeth with heavy cultures of bacteria that were antagonistic to acid-producing bacteria. Preliminary findings indicate that in some subjects the organisms remained for more than 7 months. Of great significance is the fact that 50 percent fewer of the experimental patients had new decay than did a similar control group. Intensive pursuit of this line of investigation is necessary.

Bacteremia after dental surgery.—Significant new information is being uncovered in investigations related to protection against subacute bacterial endocardities. Such protection is especially important in surgery involving patients with a history of rheumatic fever or similar heart-involvement diseases. Special protections are necessary to avoid infection of the heart lining by organisms introduced into the bloodstream. Tooth extraction is usually accompanied by the release of a shower of bacteria into the bloodstream which sometimes lodge in the meshwork of tendons that control the inner heart valves. Despite the best sterilization techniques by the dentist, bacterial showers cannot be completely avoided. This problem has been studied intensively for many years. Recently a team of dental scientists discovered bacteria in oral tissue which exists there without producing the usual accompanying inflammation of surrounding tissue. These bacteria were simply there and the tissue did not seem to object to their presence. This fact alone is so unusual it merits the further investigation that is being done, but the significant thing from the standpoint of oral surgery is the possibility that the disturbance of these organisms during manipulation may be one of the important causes of bacteremia that has been overlooked; the presence of quiescent microbes, lying in ambush, hardly had been suspected until this research was performed. With this new knowledge, perhaps there can be an explanation of why antibiotics and antiseptics do not always prevent post extraction bacteremia. The next step is to devise methods for rendering these sleeping "snipers" ineffectual before dental surgery is started. No one can say how many lives may be saved in the future because of this extraordinary disclosure.

Animal bone for grafting into human skeletal structures.—As the number of aging persons in the population increases, greater attention is being directed to the particular health problems of that group. This is true in dental research as well as in other medical research. In some individuals, particularly those who have lost teeth as a result of periodontal disease (pyorrhea), the bony ridges of the jaws often are destroyed until there is scarcely enough bone to support an artificial denture. In these patients, chewing is difficult, if not impossible, because the dentures move about whenever pressure is applied to food. As a result, the patient tends to select foods that are easy for him to handle, and frequently he slips into a dietary pattern that does not provide him with essential nutritional elements. This can have serious consequences, and constitutes an important dental facet of geriatric care.

To meet this problem, dental investigators are experimenting with methods of building up or restoring lost bony structures in the jaws. Bone grafts have been attempted with varying measures of success. Recently, however, various types of "anorganic" and "despreciated" bone preparations have been developed through research by dental and medical scientists. These preparations consist of pieces of bone taken from animals, such as calves, which have been subjected to a chemicophysical process designed to destroy the reacting factor which cause the human body to reject implants taken from lower animals. In one study, tooth sockets were filled with anorganic bone chips after extraction. Material removed from the sockets after suitable periods of time showed that the anorganic bone was being resorbed and replaced relatively slowly, but the tissues were not rejecting the material. In another highly significant experiment, anorganic bone grafts have been used successfully to increase the height of the

bony ridge in the jaw of a dog. This preliminary research opens great possibilities. The use of this type of animal bone probably can be extended to all types of plastic surgery including accidental fractures, crash injuries and congenital disformities in victims of all ages.

Radiation.—The development of knowledge of nuclear physics has brought an increased awareness of radiation and its hazards. The dental profession has long recognized the precautions that must be observed in connection with the use of X-rays, and has taught safe X-ray practice for years. As a result, the dental patient has been receiving only the minimal amounts of radiation necessary to the diagnosis of potentially serious dental conditions.

Radioactive fallout from nuclear weapons experiments has caused a marked increase in the environmental background of radioactivity, as the AEC reports confirm. Since nuclear research appears certain to continue indefinitely, it is likely that environmental radioactivity will become a growing problem, and the total radiation to which an individual may be exposed in his lifetime will increase unless steps are taken to reduce the exposure from sources that are amenable to control. Dental and medical radiography constitute an important area in which control is possible, and dentistry is keenly cognizant of its responsibilities in that connection.

The radiation received by the dental patient in the course of an annual full mouth survey is less than the yearly background radiation from the normal environment. Nevertheless, the last few years have seen intensification of efforts to reduce the amount of exposure to which dental patients must be subjected. Faster film has been developed. Newer X-ray machines are equipped with devices for filtering out a large portion of the secondary rays. Older machines are being fitted with filters when inspection shows that the patient will be better protected by so doing. Dental scientists, in cooperation with other workers, have developed an electronic amplifying apparatus that permits visualization of the internal body structures with the use of about one one-thousandth of the radiation required for ordinary radiography. When these machines are improved and made available for general use, the amount of radiation received from dental diagnostic examinations, barely significant as it is today, will be reduced a thousandfold. This research deserves enthusiastic support.

The quantity of radioactive strontium in the environment has risen considerably since 1945. This isotope, strontium 90, is released when certain types of nuclear explosions occur. It has an exceptionally long "half life," which means that it will emanate its radioactivity for decades in significant amounts. From the biological standpoint, strontium is chemically similar to calcium in that it can enter the crystal structure of the mineral parts of our bodies, mainly the bones and the teeth. An important difference, however, is that whereas calcium in the bones is constantly being replaced by a normal exchange with the calcium that comes in our food, strontium has a great affinity for the bone and tooth elements and once it is deposited it remains in the structures forever. Ordinarily strontium does no harm, and the amounts we pick up in our daily diet are not significant to health. But when radioactive strontium 90 is taken into the body, it is trapped in the teeth and bones and becomes, in effect, a built-in source whose radioactivity will continue even after death.

It has been determined by authoritative scientists that the strontium 90 content of milk has risen considerably and is still rising. The milk in the area of St. Louis is reported to have had one of the highest strontium 90 levels for 1958.

A project has been started in St. Louis that is aimed at getting the most precise possible measurement of the rate at which our bodies are picking up strontium 90. Dentists, in cooperation with physicians and laymen, have started to collect deciduous "baby" teeth from all parts of the country for determination of their strontium 90 content. They expect to analyze half a million teeth in the next 10 years. From information on the background of the children who shed these teeth, invaluable data will be obtained on the absorption of strontium 90. Deciduous teeth now being shed were formed from the minerals present in the food eaten by the mothers and infants during the first few years of fallout, from 1948 to 1953, and they represent a baseline for comparison of later analysis. This kind of information is of critical importance to all of humanity.

Salivary glands and the endocrine system.—Intensified study of the salivary glands and the endocrine system is producing significant new information. Previous scientific reports have indicated that the saliva glands, in addition to excreting saliva into the oral cavity, may affect the functions of other glands such as the pancreas. Saliva glands themselves are influenced by other parts of the body. Recently it has been shown that periodic stimulation of the pulp

of the incisors of rats resulted in enlargement of the saliva glands under the lower jaw. Extracts of beef saliva glands have been shown to contain a substance which, upon injection into rats, causes a sharp rise in the blood sugar level, evidencing a relationship between the salivary glands and diabetes. Relationships between salivary and thyroid glands also are receiving study. The importance of these preliminary suggestions will not be clarified until a great deal more work has been done, but the possibility that the salivary organs may affect glandular diseases is deserving of intensified exploration.

Saliva itself is under continual investigation by dental research workers. A recent study shows that the steroid content of a person's blood is reflected clearly in the steroid content of his salivary secretions. The blood steroid level is an indication of the quantity of hormones such as cortisone that is being circulated in the body at the time. The level of such hormones rises in certain disease conditions of the adrenal glands. Heretofore, these conditions have been diagnosed in part by running steroid determinations on blood serum; with the discovery of the saliva steroid parallel, these tests may be simplified markedly with the result that diagnosis may be accomplished faster and at lower cost.

In other studies there have been indications that saliva may be an important medico-legal tool. Tests have been developed to show whether saliva is of human or animal origin. The tests were effective even after the saliva was dried for a considerable period of time. Elsewhere, it has been found that saliva contains a factor similar to that sometimes found in blood which will agglutinate with oral lactobacilli, the bacteria that are believed to have a strong relationship to the dental decay process. The tests suggest that this factor or antibody may be important in the acquisition and maintenance of immunity to dental decay.

TRAINING GRANT AND FELLOWSHIP PROGRAMS

Among the foremost problems in dental health and dental education is the acute shortage of professional personnel. The pressing need for additional dental practitioners is eclipsed only by the need for well-trained professional teachers and research workers in the dental schools.

Both the quality of dental education and the promise of reducing dental disease through prevention would be enhanced greatly if additional trained manpower could be made available.

At the present time, each of the country's dental schools is attempting to find more full-time clinical teachers. There are more than 250 budgeted vacancies on the faculties of the dental schools, not including those of the 3 schools most recently established. With the advent of the 6 to 10 new schools currently being considered, the need for teachers will become even more serious.

In addition, many of the schools now are attempting to increase their enrollments in order to reduce the shortage of dentists. In several of the schools there also is a need to reduce the teacher-student ratio and to release more teaching time for research. None of these worthwhile purposes can be accomplished without additional teaching and research personnel.

Under the NIDR training grant program a start toward meeting the acute need for teaching and research personnel is being made. Eighteen training centers have been established as follows: Alabama, Baylor, California, Harvard, Illinois, Indiana, Michigan, Minnesota, New York, Northwestern, Ohio State, Pennsylvania, Pittsburgh, Rochester, Western Reserve, Massachusetts Memorial Hospital, and Medical College of Virginia. At these institutions graduates research training currently is being given to persons who are interested in careers in dental teaching and research. These individuals are being trained in a variety of clinical and basic science categories. Several persons from institutions not designated as training centers are enrolled under the programs. On completion of their programs the vast majority of the trainees will assume teaching and/or research positions. Dental education and dental research thus will be improved to the long-range betterment of dental health for all. This important work should be expanded in order to further to improve the quality and quantity of dental education and also to accelerate the whole dental research and education effort. In this way realistic progress can be made toward the reduction of the broad prevalence and severity of dental disease.

The budget item for the training grant program for 1960 is \$650,000. In view of the critical and immediate need for teachers and research workers, the association believes this amount is inadequate and recommends that it be increased by \$500,000 to \$1,150,000. This would permit the inauguration of 10 additional training programs which already have been approved and can be activated if the

funds are made available and would permit approval and activation of about four additional applications which will be received next year. This increase would permit the inclusion of between 40 and 45 additional trainees in the program next year, bringing the total to about 130, and would constitute a significant step toward relieving the critical manpower problem with which are are faced.

It should be noted that a minimum of 3 years of training and experience beyond a baccalaureate or a dental degree is required to produce a person qualified for teaching and research in either basic or clinical sciences.

It also is important that highly trained investigators are needed in many specialized fields of dental research such as preventive dentistry, dental epidemiology, chronic disease relationships, aging studies, periodontal disease, cleft palate. Research personnel skilled in these specialized fields are not currently available but must be trained if satisfactory progress in these areas is to be achieved.

All of these considerations illustrate the immediate need for expanding the training program in accordance with the minimum recommendation stated above.

The association also recommends a moderate increase in appropriations for the NIDR fellowship program. All of the general considerations justifying expansion of the training grant program apply with equal force to the fellowship program.

The fellowship programs provide modest annual stipends for qualified persons desiring advanced education. Emphasis in these programs is upon the basic biological sciences with orientation, of course, toward an appreciation of dental problems.

While under the fellowship program, there are no commitments, moral or otherwise, by the recipients that they will remain in teaching or research, the limited experience has been that most of the applicants for fellowships tend toward academic careers. This is particularly true of the persons in the senior or postdoctoral fellowship program.

At the present time, there are between 35 and 40 grantees receiving regular fellowship stipends. The amount of the stipends are based upon the individual recipient's previous training beyond the baccalaureate or professional degree. The awards are made directly to the applicant who selects for himself the institution at which he will take his training.

Based upon the number and high quality of the applications for regular fellowships that have been received in 1959, it appears extremely desirable to increase this program to allow the award of about 35 additional fellowships in 1960. There is no question that the approximately \$227,000 required for such expansion would be well worthwhile. Because of the limited funds available this year, it has been necessary to reject a good many fellowship applications from highly qualified persons. Most of the individuals whose applications have been rejected are no longer available and are lost to the research effort. With talented personnel in such short supply, this is a development that should be avoided if at all possible.

In addition to the regular fellowships for graduate personnel planning to obtain advanced degrees, there are student part-time and postsophomore programs to encourage undergraduates to get research training and experience early in their education. Grants for this purpose are made directly to dental schools which in turn select the persons to be awarded fellowships.

At the present time six student fellowships may be awarded annually at each dental school. This association believes that this program has shown such outstanding promise in creating interest in research and increased appreciation for dental education among dental students that it should be continued and expanded. It is recommended that the number of student fellowships authorized at each school be increased from six to eight. This would compare with the number awarded at each medical school, and would necessitate only a nominal increase of about \$75,000 in appropriations for this part of the program.

In accordance with the above, the association recommends that appropriations for the fellowship program be increased from \$423,000 to \$723,000, an increase of \$300,000 to be apportioned, \$75,000 to the part-time student fellowship program and \$225,000, to the regular fellowship program. This would require \$223,000 above the amount recommended in H.R. 6769.

DIRECT OPERATIONS

The association also recommends that the appropriation for research conducted at the NIDR be increased by \$200,000 above the amount recommended in the President's budget, from \$1,377,000 to \$1,577,000. This would be \$66,000 above the amount recommended in H.R. 6769. This increase for direct operations should be used for research that cannot be conducted readily by the schools or other research institutions. This would include expansion of the promising germ-free animal studies, expansion of the programs on epidemiology and, very importantly, dental diseases associated with aging.

The extremely promising work with animals using the germ-free technique should be continued and expanded. Because of the costly equipment and the relatively large space required for this work, it can best be carried out by the NIDR at its own facilities.

There also is a need to conduct epidemiological studies, some of which should be carried on in foreign lands. Much work of this kind is necessary in relation to periodontal disease and caries. In addition, there is important work to be done in the field of nutrition and its relation to oral diseases. All of this work is of such nature that it can most efficiently and effectively be carried on as a direct operation of the NIDR.

Another extremely important and timely problem that should be attacked through study both at Bethesda and in private research institutions is dental diseases associated with aging and the related problem of dental care for the increasing number of aged persons in the population. It is extremely important that additional studies in this area get underway as soon as possible.

SUMMARY

To sum up, the American Dental Association and the Nation's dentists are proud of the progressive dental research program that is being carried out in virtually every dental school throughout the country. The association recommends that this program be allowed \$1 million additional funds for moderate expansion during the next fiscal year. This is the approximate amount recommended in H.R. 6769.

The association believes that everything possible should be done to relieve the shortage of trained dental teachers and research workers and in turn, the shortage of dental practitioners. It is recommended therefore that budget items for the training grant program be increased by \$500,000 and the fellowship program by \$300,000. This would require \$150,000 and \$223,000, respectively, above the amounts recommended in H.R. 6769.

The association recommends additionally that funds for direct operations of NIDR be increased by \$200,000 to permit increased attention and study of certain important dental health problems.

It is believed firmly that these increases totaling \$2 million over the amount recommended in the President's budget and \$439,000 over the amount contained in H.R. 6769, are necessary to assure a sound and reasonable rate of progression in dental education and dental research.

INCREASED FUNDS FOR DENTAL HEALTH ACTIVITIES

Dr. NAGLE. I am Dr. Raymond J. Nagle, dean of the College of Dentistry of New York University. I am also a member of the American Dental Association's Council on Dental Education and president-elect of the American Association of Dental Schools. I am accompanied by Dr. C. Willard Camalier, assistant secretary of the American Dental Association, and Mr. Hal M. Christensen, assistant secretary of the association's council on legislation.

We are here today to present the association's views and recommendations concerning fiscal 1960 appropriations for the dental health activities of the Public Health Service.

The American Dental Association recommends that the appropriations contained in H.R. 6769 for dental health activities of the Public

Health Service be increased from \$9,725,000 to \$10,164,000, an increase of \$439,000, to be apportioned as follows:

Training grants-----	\$150, 000
Research fellowships-----	223, 000
Direct research at NIDR-----	66, 000
Total-----	439, 000

The amount recommended in the House bill apparently is based upon an amended budget submitted by the Public Health Service to the House Appropriations Subcommittee which allocates increases of \$350,000 for training, \$77,000 for fellowships, and \$144,000 for direct NIDR research appropriations.

The amounts recommended by the association would bring the increases for these three programs to a more adequate level of \$500,000, \$300,000, and \$200,000 respectively.

The total appropriations for fiscal 1960 would then be \$10,164,000, an increase of \$2,744,000 over the amount appropriated for 1959.

In this year marking the 100th anniversary of the founding of the American Dental Association, the dental profession looks with pride upon the achievements that have been made in improving the dental health of the people and the inroads that are being made into the causes of dental diseases and the means of preventing them.

Much of the progress being made is due to the forward-looking and constructive decisions that have been made by this committee in support of dental research.

On behalf of the 90,000 members of the American Dental Association, I wish especially to express appreciation for this committee's tireless leadership and support in providing for the establishment of a building for the National Institute of Dental Research. As you know, actual construction of the building will be undertaken this year, climaxing more than 10 years of efforts and, in this the association's centennial year, constituting a fitting and monumental tribute to a century of progress in dental health.

The past year has been productive and rewarding in the field of dental research, both in terms of significant research findings and intensification of activity and interest. The program of the National Institute of Dental Research, including both intramural and extramural research is progressing steadily, contributing significant new information and understanding of the causes of oral disease and the relationship of oral disease to general health.

BROADENING BASIC RESEARCH

The broadening of the basic research endeavor in the dental schools has had many extremely beneficial aspects. The increased opportunity for students to participate in and conduct research and the resultant improvement in the quality of their training is almost as important as the research findings that are being produced. Future generations of Americans will reap the benefits of less dental disease and better care and treatment as a result of these efforts.

Many of the findings that are being made by dental researchers have definite relationship and application to other scientific investigations. This is especially true of the studies that are being made in the areas of dental genetics, oral diagnosis and bacteriological studies, including

experiments with germ-free animals. Dental research too is making contributions in providing knowledge to enable the human race to cope with the problems brought on by the development of nuclear energy.

Although the formal statement that has been submitted for the record contains a detailed description of some of the important studies that are underway, I would like briefly to touch on one or two that seem to be of special significance.

GERM-FREE ANIMAL EXPERIMENTS

Dental research workers have found that germ-free rats did not develop dental decay when fed diets that produced severe decay in animals reared under normal conditions. Moreover, when bacteria were introduced into the germ-free colonies, decay appeared very quickly. By introducing individual strains of bacteria, investigators have begun to pinpoint the specific germs that cause decay. Eventually, the studies of germ combinations that produce decay in animals can be extended to investigate combinations that tend to prevent decay. This fascinating problem already is being investigated in pilot studies of human subjects.

BACTEREMIA AFTER DENTAL SURGERY

Significant new information is being uncovered in investigations related to protection against subacute bacterial endocarditis. Recently a team of dental scientists discovered bacteria in oral tissue which exist there without producing the usual accompanying inflammation of surrounding tissue. These bacteria were simply there and the tissue did not seem to object to their presence. This fact alone is so unusual it merits the further investigation that is being done, but the significant thing from the standpoint of oral surgery is the possibility that the disturbance of these organisms during manipulation may be one of the important causes of bacteremia that has been overlooked. The next step is to devise methods for rendering these sleeping "snipers" ineffectual before dental surgery is started. No one can say how many lives may be saved in the future because of these extraordinary and new disclosures and findings.

RADIATION

The development of knowledge of nuclear physics has brought an increased awareness of radiation and its hazards. Since nuclear research appears certain to continue indefinitely, it is likely that environmental radioactivity will become a growing problem. For example, it has been determined by authoritative scientists that the strontium 90 content of milk has risen considerably and is still rising. A project has been started in St. Louis that is aimed at getting the most precise possible measurement of the rate at which our bodies are picking up strontium 90. Dentists, in cooperation with physicians and laymen, have started to collect deciduous "baby" teeth from all parts of the country for determination of their strontium 90 content. They expect to analyze half a million teeth in the next 10 years. From information on the backgrounds of the children who shed these teeth, inval-

able data will be obtained on the absorption of strontium 90. Deciduous teeth now being shed were formed from the minerals present in the food eaten by the mothers and infants during the first few years of fallout, from 1948 to 1953, and they represent a baseline for comparison of later analysis. This kind of information is of critical importance to all of humanity.

To assure attainment of the desired objectives in dental research, it is essential that the orderly but progressive expansion toward the full capacity of our dental research potential be continued.

There are now about 330 NIH-supported research projects underway in the dental schools and other research institutions throughout the country. Many of these are of several years duration. To assure best results and make the most economical use of available funds, they must be continued to completion.

NEEDS FOR 1960

It is conservatively estimated that about \$3 million will be needed during fiscal 1960 to continue the essential investigations that are underway but have not been completed. If 1960 appropriations are kept at the present level, there will be only about \$400,000 to activate projects that will have been approved but not paid before the end of the current fiscal year. This might well preclude entirely any consideration of new applications for grants during the next year since by the end of this year (after the June meeting of the National Advisory Dental Research Council) there will be approved but unpaid grants amounting to well over \$1 million.

Put another way, before the end of the present fiscal year, about 100 projects representing a need for more than \$1 million will have been approved by the dental advisory council but not paid because of lack of funds in the fiscal 1959 budget. And I can attest to this, as I am a member of that council.

Of the approximately 115 projects that should be activated next year, 80 to 90 will have to be turned down for lack of funds. This large number of grants which will be approved but not paid is made up of those that have undergone and survived the intensive and critical screening and evaluating process to which all applications are subjected.

This association believes that the rejection of this large number of worthy applications while the program is yet in the beginning stages would be extremely unwise and might constitute a deterrent or discouragement to the future participation of our research institutions in the program. Accordingly, the association recommends that the budget item for project grants be increased by approximately \$1 million which is included in H.R. 6769. This will permit initiation of several important new investigations and permit continuation and extension of essential projects such as those outlined in the statement that has been submitted for the record.

Among the foremost problems in dental health and dental education is the acute shortage of professional personnel. This pressing need for additional dental practitioners is eclipsed only by the need for well-trained professional teachers and research workers in the dental schools.

LACK OF CLINICAL TEACHERS

At the present time, each of the country's dental schools is attempting to find more full-time clinical teachers. There are more than 250 budgeted vacancies on the faculties of dental schools, not including those of the three schools most recently established. With the advent of the 6 to 10 new schools currently being considered, the need for teachers will become even more serious. And I might say that this is being partly solved by the present teacher training research program, which is one of the most important programs which I feel has come out of the service for a long time.

The budget item for the training grant program for 1960 is \$650,000 and using the figures apparently used by the House committee, the item would be \$1 million. In view of the critical and immediate need for teachers and research workers, the association believes this amount should be increased by \$500,000 to \$1,150,000. This total increase of \$500,000 would permit the inauguration of 10 additional training programs which already have been approved and can be activated if the funds are made available. This would permit the inclusion of between 40 and 45 additional trainees in the program next year, bringing the total to about 130, and would constitute a desirable step toward relieving the critical manpower problem with which we are faced.

INCREASE FOR FELLOWSHIP PROGRAM

The association also recommends a moderate increase in appropriations for the NIDR fellowship program. All of the general considerations justifying expansion of the training grant program apply with equal force to the fellowship program.

At the present time, there are between 35 and 40 grantees receiving regular fellowship stipends. Based upon the number and high quality of the applications for regular fellowships that have been received in 1959, it appears extremely desirable to increase this program to allow the award of about 35 additional fellowships in 1960. There is no question that the approximately \$227,000 required for such an expansion would be well worth while. Because of the limited funds available this year, it has been necessary to reject a good many fellowship applications from highly qualified persons. Most of the individuals whose applications have been rejected are no longer available and are lost to the research effort. With talented personnel in such short supply, this is a development that should be avoided if at all possible.

This association believes that the student fellowship program has shown such outstanding promise in creating interest in research and increased appreciation for dental education among dental students that it should be continued and expanded. It is recommended that the number of student fellowships authorized at each school be increased from six to eight. This would compare with the number awarded at each medical school and would necessitate only a nominal increase of about \$75,000 in appropriations for this part of the program.

And I might say at my college we have felt that to be such a valuable program that we are matching two for one. For every fellow-

ship awarded by the Public Health Service, we award two of our own. In this case we have 18 student fellowships that will be in progress beginning June 1.

In accordance with the above, the association recommends that appropriations for the fellowship program be increased from \$423,000 to \$723,000, an increase of \$300,000 to be apportioned, \$75,000 to the student part-time program and \$225,000, to the regular fellowship program. This would require \$223,000 over the amount contained in H.R. 6769.

INCREASE FOR RESEARCH AT NIDR

The association also recommends that the appropriation for research conducted at the NIDR be increased by \$200,000 over the President's budget, from \$1,377,000 to \$1,577,000. This would require an increase of \$66,000 over the amount contained in H.R. 6769. This increase for direct operations should be used for research that cannot be conducted readily by the schools or other research institutions. This would include expansion of the promising germ-free animal studies, expansion of the programs on epidemiology and, very importantly, dental diseases associated with aging.

To sum up, the American Dental Association and the Nation's practicing dentists are proud of the progressive dental research program that is being carried out in virtually every dental school throughout the country. This association believes and recommends that this program be allowed \$1 million in additional funds for moderate expansion during the next fiscal year.

The association believes that everything possible should be done to relieve the shortage of trained dental teachers and research workers and in turn, the shortage of dental practitioners. It is recommended, therefore, that appropriations for the training grant program be increased by \$500,000 and the fellowship program by \$300,000, or \$150,000, and \$223,000 over H.R. 6769.

The association recommends additionally that funds for direct operations of NIDR be increased by \$200,000 or \$66,000 over H.R. 6769, to permit increased attention and study of certain important dental health problems.

These recommended increases would require that the amount recommended in H.R. 6769 for dental health activities be increased by \$439,000.

The American Dental Association appreciates this opportunity to appear before the committee. Thank you.

Senator HILL. Doctor, we will be glad to hear from you, sir.

Mr. CHRISTENSEN. I have nothing to say to add to Dr. Nagle's statement. Thank you, sir.

Senator HILL. Dr. Camalier, you are an old friend. We are always happy to have you here, sir.

Dr. CAMALIER. Thank you, Mr. Chairman.

The only thing I have to say is that I feel this presentation was very finely done this morning. But I would like to add, on behalf of the American Dental Association—and I can speak authoritatively in that respect—we do appreciate very much your great leadership in these health matters, not only in dentistry but in every other phase, both nationally and internationally.

Senator HILL. Doctor, I may say that you have made a very fine presentation here this morning, and that includes these last words that you have spoken.

Will you join me in that, Senator Kuchel?

Senator KUCHEL. Yes; indeed, I will.

Senator HILL. You have made a very fine presentation. And I know Senator Kuchel will join me in extending our congratulations to the American Dental Association and its members in this centennial year of the association.

WORK OF AMERICAN DENTAL ASSOCIATION

I have had occasion to go back and examine the record, the history of the association, through a good many years. The association certainly has reason to be awfully proud of that record. It is a record of deep interest and of continuing efforts, great efforts in behalf of the health of the American people, to give better and more advanced dental care and treatment to the American people, to do all you can to promote the health of the American people. And we congratulate you and express our pride and say that the example that the association has set is an inspiring one for all of us.

We thank you very much.

Senator HILL. Senator Cannon?

Senator, we are glad to have you here with us, sir. We will be glad to have you proceed now in your own way.

GRANTS FOR SEWAGE TREATMENT WORKS

STATEMENT OF HON. HOWARD W. CANNON, A U.S. SENATOR FROM THE STATE OF NEVADA

GENERAL STATEMENT

Senator CANNON. Thank you, Mr. Chairman.

I should like to thank the committee for this opportunity to appear in connection with the Federal Water Pollution Act.

In my contacts with officials and elective officers of the State of Nevada and from my own experiences as city attorney of the largest municipality in Nevada for 10 years; I can think of no other measure which is as vital to the health and growth of my State than Federal grants for sewage treatment works. Cities in Nevada, particularly in the western and southern section, have undergone tremendous growth in the last few years. Financially speaking, these municipalities, called on to provide necessary and indispensable services such as are provided in this act, have had their backs to the wall.

Two projects under Public Law 660 have recently been completed using money made available under this act. The first of these projects was for additional treatment facilities for Henderson, Nev., which is engaged in important defense and chemical production; the second was for additional plant capacity at the Las Vegas treatment plant. Both of these communities have been growing so rapidly that the city governments would have been unable to provide adequate sanitation facilities from already strained local revenues, even at the cost of a threatened health menace.

In western Nevada two applications have been made and approved for projects in Carson City, our State capital, and Sparks, Nev. Carson City is well into the planning stage for construction of a new plant, while in Sparks there is a desperate need for construction of an interceptor.

Furthermore, Mr. Chairman, projects are anticipated for Winnemucca, Minden-Gardnerville, Reno, Las Vegas, and Douglas County. Only last month Clark County was approved for a grant under Public Law 660 of \$200,000 for expansion of their sanitation system in this rapidly developing area.

I am including with my testimony, Mr. Chairman, a tabulated chart of past, present, and anticipated applications covering virtually every city in Nevada which has a record of population growth in recent years.

INSTANCES OF VALUE OF WORK

Speaking for a moment on the inestimable good accomplished by this program, I would point out a serious sewage problem in the community of Pittman, Nev., which adjoins the industrial complex of Henderson. The city of Henderson was heavily bonded by both general obligation and revenue bonds, and it is a fair statement that this project could not have been financed without the grant under Public Law 660. Had this situation not been remedied, the menace to health and the economic well-being of this important area could have had a crippling effect.

Carson City and Sparks are almost in the same financial condition as existed in Henderson. Neither of these cities could have considered the proposed projects without the assurance of financial assistance. At Carson City, for example, the sewage plant is at its maximum capacity with the immediate prospect that any additional load imposed would result in improperly treated sewage.

In Sparks, tremendous developments in construction on the northern border of the city has seriously taxed the capacity of the older downtown portion of the collection system and resulted in sewage being backed up into homes and business establishments during periods of peak flow.

Winnemucca and Minden-Gardnerville began planning only after they were informed of the availability of the grant. And while Reno, Las Vegas, and Clark County are in a somewhat better financial standing than these smaller communities, they, too, desperately need every possible form of assistance. In all honesty, all of the projects I have mentioned are essential and vital. They are backed and supported by competent engineering studies and by independent judgments.

ATTITUDE OF LOCAL OFFICIALS

I might add, gentlemen, that there seems a willingness by local officials—however convinced they are by the necessity of these projects—to put available tax moneys into other projects which might or might not be as important a community service, but are far more attractive esthetically, or so they might appear to the public. However lacking in glamor these projects may seem, I can say that in my own State they may not be undertaken at all without Federal funds, and certainly they would be delayed for many, many years to come.

To economize on this measure by arbitrarily cutting the cost of the proposed appropriation would be a severe blow to the health, welfare, and growth of the cities of my State.

I would like to inform the committee that my statements today are based on extensive consultation with responsible sources in my State and in my firm belief in the necessity of this bill.

I thank the committee for this opportunity.

Senator HILL. Senator, as you know, we had \$45 million for this program for the present fiscal year, and the Department of Health, Education, and Welfare requested \$45 million for this year. That amount was cut by the budget estimate to \$20 million, but the House committee and the House itself restored the \$45 million. If the \$45 million as carried in the bill is passed by the Senate, I take it that that will mean that you will have the funds that you need for your projects.

Senator CANNON. It does appear that we will have, if the \$45 million, as proposed, is carried.

Senator HILL. Senator Kuchel, any questions?

Senator KUCHEL. No questions.

Senator HILL. Thank you very much, Senator. We appreciate very much your appearance here this morning.

Your tabulated chart will be included in the record.

(The tabulated chart referred to follows:)

Federal grants for sewage treatment works

	City	Cost	Grant under Public Law 660
Completed projects.....	Las Vegas.....	\$151, 248	\$45, 374
	Henderson.....	361, 000	108, 300
Applications approved.....	Sparks.....	377, 000	133, 100
	Carson City.....	475, 200	139, 560
	Clark County.....	200, 000	-----
	Minden-Gardnerville.....	500, 000	-----
Anticipated projects.....	Winnemucca.....	350, 000	-----
	Reno.....	125, 000	-----
	Las Vegas.....	150, 000	-----
	Douglas County.....	500, 000	-----

STATEMENT OF SENATOR HENNINGS

Senator HILL. Senator Hennings has requested that his statement in support of an appropriation of \$45 million for construction of waste treatment works be included in the record. The Senator's statement will be inserted at this point.

(The statement referred to follows:)

Mr. Chairman, the 84th Congress, recognizing the fact that one of the most pressing problems then facing the Nation was the need for a continued supply of fresh, pure water, enacted legislation authorizing a 10-year program of grants to local communities for the construction of sewage treatment facilities.

As the distinguished chairman knows, the purpose of this legislation was to keep our Nation's rivers and streams as free as is humanly possible from the pollution and other health hazards which is the natural penalty this Nation must pay for industrial expansion and a rapidly increasing population. The 84th Congress recognized that we could no longer follow in the footsteps of our fathers and grandfathers and dispose of waste by dumping sewage into the nearest stream. The legislation approved by that Congress was aimed at a health problem which existed then and a water problem which loomed just over the horizon. That legislation was essential then. It is essential now.

Despite these essential needs, the administration has sought to slash the funds for the Nation's clean streams program by more than half. The administration is seeking to abandon the program altogether in 1961. It is my opinion that the administration is being penny wise and pound foolish. In persisting in this policy it is sacrificing an investment already made. For the sake of a paper balance of the national budget, it is willing to abandon a program already proved a success, a program which has already reduced many, many health hazards—a program which, if carried to its ultimate, would assure future generations of unlimited amounts of water for industrial and individual use.

The national value of this program, Mr. Chairman, can be illustrated by what has happened in this field in my own State of Missouri.

In the past 3 years, 56 Missouri communities have planned and constructed or are constructing sewage treatment facilities. Federal grants to these communities have amounted to about \$3 million and the local communities have spent about \$15 million. As a result, Missouri has taken a long first step toward making its rivers and streams clean and pure. Nor has this effort been all to the benefit of Missouri for the benefits of clean streams in Missouri flow downriver to Arkansas, Oklahoma, Texas, Mississippi, Louisiana, and Tennessee.

Unfortunately, Missouri's work in this field has come to an abrupt halt for this fiscal year. I was informed only recently by the Department of Health, Education, and Welfare that water pollution grants earmarked for Missouri had been exhausted.

Although Missouri's construction may have been halted, Missouri's interest has not waned. At the present time 29 sewage construction projects are pending before the Missouri State Water Pollution Board. These projects have a total estimated cost of over \$13 million. The Federal share of the cost is estimated at only slightly more than \$3½ million.

Mr. Chairman, if the administration's recommendations concerning the Nation's water pollution program are allowed to stand, Missouri will receive only \$424,450 in fiscal 1960. If the administration's recommendation to reduce appropriations for water pollution to \$20 million for the entire Nation for fiscal 1960 is allowed to stand few, if any, of Missouri's 29 projects will be built.

I am of the opinion that to reduce the water pollution program would be wasteful and unwise—to abandon it would be folly. The advantages of clean streams, free of health hazards, are obvious.

In view of this, I strongly urge this committee to act promptly to restore the funds for the Nation's water pollution program to their present level. I urge this committee to follow the action of the House of Representatives and recommend an appropriation for fiscal 1960 of \$45 million.

STATEMENT OF SENATOR ANDERSON

Senator HILL. Senator Anderson has written to Senator Hayden, chairman of this committee, requesting that his statement in support of the House action in approving \$45 million for waste treatment works construction be included in the record. His statement will appear at this point.

(The statement referred to follows:)

STATEMENT IN SUPPORT OF FUNDS FOR THE WATER POLLUTION CONTROL PROGRAM

When the 84th Congress enacted a new Federal Water Pollution Control Act we took a long step forward in conservation of our water resources and in the improvement of health standards in hundreds of communities throughout the Nation.

The Federal Water Pollution Control Act has made the construction of new sewage treatment facilities in hundreds of communities a reality. It has not been for lack of interest of many communities in the past that has prevented them from building sanitation facilities, but the lack of financing to do the job. The Water Pollution Act and subsequent appropriations have launched many of the communities on programs that have already improved the health of the community and improved the water supply and quality of water in many of our small streams and rivers.

In New Mexico alone, as of February 1959, 28 communities had taken advantage of funds provided for this program. These communities use revenue bonds and/or general obligation bonds to match Federal construction grant

funds allocated to them for construction of sanitation facilities, and are moving ahead with a program that would never have been possible to them without some outside help.

I was very much disturbed when I found that the budget proposal submitted by the Department of Health, Education, and Welfare for the 1960 requirements had been cut from \$45 million for 1959 to \$20 million for 1960 fiscal year. This would have meant that New Mexico's share for 1960 would have been cut from \$631,350 to \$245,000. The city of Albuquerque, on the Rio Grande River, suffering from growing pains because of the many defense installations located there, and now bonded to the limit to provide sanitation facilities for defense workers, has applied for \$250,000 to assist in providing additional sewage plant needs. If we received the cut proposed by HEW, either Albuquerque would not get the required facilities or other communities would be left out. I was, therefore, very pleased to see that the House of Representatives raised this back to the 1959 level.

I have consistently been against useless spending programs and, as I have stated many times, I believe that these programs should be watched very carefully. I do not, however, consider this type of a program a spending program, but an investment in the future health and welfare of the country. The elimination or reduction of public health hazards cannot be entirely evaluated in terms of dollar value to the communities of our country, or even in terms of protecting our greatest natural resource—the waters of our lakes and streams; but we all know that in a water-short area, in an arid region, water quality must be maintained. The conservation of water for safe downstream use for domestic water supply, industry, agriculture, recreation, and fish propagation is being made possible by the provision of adequate municipal sewage treatment facilities. The Federal water pollution control program will, if continued, further stimulate construction of needed municipal sewage treatment facilities. The program is important to my State and to the country as a whole. I therefore urge that this committee concur in the recommendations of the House and approve not less than \$45 million for the 1960 fiscal year.

Senator HILL. Congressman, we are happy to have you here, sir. Do you want to put your full text in the record and then summarize for us and make any statement you see fit?

RADIOACTIVITY RESEARCH

STATEMENT OF HON. SAMUEL S. STRATTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

GENERAL STATEMENT

Representative STRATTON. Yes, sir. I believe the text itself is relatively brief, Mr. Chairman.

Senator HILL. You just proceed in your own way, Congressman.

Representative STRATTON. I appreciate the opportunity to appear briefly before the committee this morning to urge your approval of funds for special research into the effects of radioactivity on the part of the Department of Health, Education, and Welfare. Specifically, I desire to bring to the attention of the committee a study recently made in New York State by officials of the New York State Department of Health which I feel has important nationwide significance, and to urge this committee to appropriate adequate funds for the U.S. Public Health Service to permit the Service to undertake similar studies along the lines of the New York State study in other sections of the United States.

The study to which I refer was made recently in New York State by Dr. John T. Gentry, New York State public health official for the Syracuse region, and it discovered the startling fact that there was a close correlation between areas in New York State where certain

natural rock outcroppings occurred which were comparatively low in radioactivity, and the incidence of malformed babies.

The study indicated that in various areas of the State where these low grade radioactive rocks occurred that the chances of babies being born with deformities of one kind or the other was substantially higher than in parts of the State where such rocks did not protrude above the surface.

For example, in the case of harelips and cleft palates, the study indicated that normally throughout the State this malformation occurs in some 13 out of 1,000 births. In these particular areas, where radioactive rocks outcrop, that incidence goes up to 20 per 1,000 births.

IMPORTANCE OF STUDY

Since some of these regions indicated in Dr. Gentry's study occur in my congressional district, I became interested in the results of this study, and as a parent I recognized the significance of the conclusions to which this study appeared to be pointed. It seemed to me that this was information of a highly important nature.

Obviously, if there was a direct causal relation between these rocks and malformed babies, this was information which every individual ought to know about, and perhaps as a public health problem something should be done in the future to protect residents in these areas. Secondly, if this situation existed in New York State with rock outcroppings of a relatively low degree of radioactivity, might the situation not be even more serious in other areas of the country where more radioactive rocks occurred near the surface, such as the Rocky Mountain areas and other regions of the West and South? Thirdly, here there appeared to be a very definite line of inquiry to establish some of the congenital effects of radiation which was based on occurrences over a long period of years in the past. While the radiation in this case is of a relatively low degree of intensity, here at least we do have an opportunity to study actual occurrences that have taken place in the past, rather than, as sometimes seems to be the case in discussions of the effects of radioactive fallout, attempt to project what effects might occur one or two generations into the future.

NEED FOR NATIONWIDE STUDY

For these three reasons, then, Mr. Chairman, it seemed to me highly important that the studies which had been begun so auspiciously in New York State should be carried forward without delay in other parts of the country. It seemed to me that the obvious office which should carry out this responsibility would be the Public Health Service. Unfortunately, by the time this information came to my attention, the appropriation for 1960 for the Department of Health, Education, and Welfare was already through the House.

I have, therefore, felt that it was important that this matter should be brought to the attention of the Members of the Senate in the hope that some steps could be taken in your body to set aside funds for this important project rather than having the whole matter delayed for an additional year. I have been in touch with Dr. Burney, the Surgeon General of the United States, and also with Dr. Francis J. Weber, Chief of the Division of Radiological Health. They tell me that even though the House did add some \$800,000 in funds to the

administration's budget request for this Department to cover studies in the field of radiological effects, their plans do not now include this particular type of study. They advise me that if the Senate approves this additional \$800,000, the Service may be able to conduct some small inquiries along the lines of the New York study. They also point out that if these funds are not included, there is no possibility of being able to undertake this kind of study at all. I have also asked Dr. Weber to tell me exactly what funds would be required specifically to undertake, on a preliminary pilot basis, a study into the same factors covered by the New York State study. He has advised me that an additional \$50,000 or \$60,000 would make it possible for this study to be undertaken for a single year.

AMOUNT REQUESTED

Mr. Chairman, and members of the committee, I would therefore most seriously and earnestly like to urge the committee either to approve the \$800,000 originally added to the bill in the House for radiological research in general by the U.S. Public Health Service, with the hope that at least some of this money may be expended along the lines that I have indicated; or, more suitably, that the committee appropriate \$50,000 to \$60,000 specifically for research designed to determine whether the surprising correlation between natural radioactive rock formations and malformed babies does hold true in other sections of the country. I believe that as lawmakers we have a serious responsibility to the parents of this country and to generations yet unborn to establish the real facts in this matter as rapidly as possible, not only so that we can take whatever corrective steps are necessary, but so that we can more fully understand the effects of radioactivity in even greater amounts on future generations of Americans.

FUNDS FOR SANITARY ENGINEERING ACTIVITIES

Specifically, Mr. Chairman, I might add that H.R. 6769 does include a figure of \$14,590,000 for sanitary engineering activities, under the Public Health Service budget. This includes a figure of some \$1,439,000 for these specific radiological studies, which, as I indicated, was some \$800,000 more than was spent in 1959.

I would like to urge either that the total amount be increased by the committee to \$14,690,000; or that in whatever funds the committee does see fit to appropriate, specific reference be made to this kind of study in the amount of \$50,000 or \$60,000.

Thank you, Mr. Chairman.

Senator HILL. Congressman, I may say that we had testimony before the Senate Committee on Labor and Public Welfare, the Legislative Committee, on Thursday and Friday of last week, which certainly sustained and supports the case that you made here this morning.

Senator Kuchel, any questions?

Senator KUCHEL. Yes, Mr. Chairman.

REQUEST FOR COPIES OF STUDY

I wonder, Congressman Stratton, if it would be possible for you to supply the committee with a copy of the study to which you refer, made by Dr. Gentry, one of your State officials.

Representative STRATTON. Yes, Senator. I have a copy with me, and I would be happy to leave it, to be included in the record or disposed of in any way you see fit.

Senator KUCHEL. I do not ask that it be made a part of the record, Mr. Chairman, but I would like to have it made available to the members of our subcommittee.

Senator HILL. I think that is a splendid idea. We had that supplied to us last week, before the Labor and Public Welfare and Legislative Committee, but I think it is good, as Senator Kuchel suggests, that we have it before this Appropriations Committee.

Representative STRATTON. I am sure that we could get other copies if the committee would so desire.

Senator HILL. Congressman, we certainly want to thank you, sir, and express our appreciation to you for your appearance and your statement here this morning.

Senator HILL. We will now hear from Hon. Bradshaw Mintener, former Assistant Secretary of HEW, in behalf of increased funds for Food and Drug Administration.

INCREASE IN FUNDS FOR FOOD AND DRUG ADMINISTRATION

STATEMENT OF HON. BRADSHAW MINTENER

GENERAL STATEMENT

Mr. MINTENER. Senator Hill and members of the committee, it is nice to come back home again.

Senator HILL. Well, we welcome you back home.

Mr. MINTENER. I appreciate and thank you for the opportunity, Senator Hill, of appearing before this committee.

I wish to express my own personal views as a citizen today on three areas which are before this committee for consideration.

Senator HILL. As former Assistant Secretary of HEW, you have had a very close insight into the Food and Drug Administration. In fact, it was under your supervision.

AREAS OF INTEREST

Mr. MINTENER. I worked on the law back in the 1930's when the 1938 act was written, Senator, and I was in charge of the Food and Drug Administration for the Secretary's office when I was there. So that is the first area I would like to speak about.

The second is the very important area of health research facilities—which, you will also recall, I worked on, and which you helped us get through so splendidly—which provides for a research advisory council to the Surgeon General for the building of health research facilities.

And the last one, which I just want to mention briefly, is Gallaudet College, which was also my responsibility, and I now serve on the board of trustees.

First of all, Senator Hill, I want to express my own personal appreciation and thanks to you, as a citizen, for the tremendous leadership you have given these programs throughout the years. I was sorry to miss you at the luncheon the other day, but I understand it was a great success. I also want to thank you for the cooperation you gave me during the time I was Assistant Secretary and was responsible for handling these budgets.

Senator HILL. You were always mighty helpful and most cooperative. We felt fortunate to have you, sir.

FUNDS FOR FOOD AND DRUG ADMINISTRATION

Mr. MINTENER. I do not have a formal statement, Senator, but I do urge this committee, if at all possible, to get this budget for the Food and Drug Administration back upon the formula which was established by the distinguished citizens committee which I had the honor of setting up, at Mrs. Hobby's request, back in 1954-55.

This committee gave a lot of time and was very knowledgeable. It was composed of distinguished citizens in many walks of life, and I think that the document which they came up with as their report should serve as a guideline to the Congress with respect to the Food and Drug Administration and its necessary financial support during many years to come.

I am convinced, Senator Hill, that unless this formula is followed, the Food and Drug Administration will never be able to perform its legal and mandated responsibilities under the Food, Drug, and Cosmetic Act to the fullest extent.

You will recall that this Citizens Committee recommended a three-to four-fold increase in the staff over the next 5- or 10-year period. As I recall the calculations made at that time, this would involve an increase of about 15 percent a year in the appropriations over about the next 8 years.

Now, from the figures I was able to get informally, if the recommendations of the Citizens Committee were carried out by the end of 1959, there would be a total enforcement staff of 1,333 positions. The 1959 budget, as I recall, provided about a 10-percent increase, which will finance a total employment of about 1,251 positions, or 72 short of the objective set by the Citizens Committee. A 15-percent increase in 1960 would call for 200 new positions to be added, and the budget which you are now considering, according to my calculations, would call for about 75 new positions, or a 6-percent increase over the present staffing. This, of course, excludes the positions which were requested for the implementation of the new food additives law which was passed by the Congress last summer.

If the 1960 budget were to provide sufficient staff to catch up to the level envisioned by our Citizens Committee, a net increase of about 300 jobs would have to be included. And here, again, I am excluding the new staff required for the food additives legislation and the new responsibilities created under that law.

These are my own informal calculations, but if the Senate, upon the recommendation of your committee, which I hope you will give, would restore, as the House did, the same \$2 million which was cut out of the original budget, it would be a great help.

I had the thrilling experience last Thursday to help dedicate the new Food and Drug building in Detroit, which was named after George Larrick, the present Commissioner. This is one of the buildings for which you previously gave appropriations. It was built by private people and will be rendered to the Government. A similar request is in the Citizens' report for a new Food and Drug building in Dallas, the new office down there.

NEED FOR NEW BUILDING FOR FDA

The second thing that the Food and Drug Administration needs desperately, Senator Hill, is a new building for its total operations. The Food and Drug Administration today is scattered in four or five different buildings around this city, and the laboratories which are now being used by the Food and Drug Administration are not only antiquated, if I may say so, but in my judgment they are disgraceful for the Federal Government. And if it is at all possible to furnish the appropriation necessary for this new building, it would certainly be a very important advance in the carrying on and implementing of the Food and Drug Administration's program.

I do not like to make comparisons, but I was advised last year by Dr. Miller, head of the Meat Inspection Service over in Agriculture, that they have over 3,000 inspectors for some 1,100 plants. When I came down here in 1954, the Food and Drug Administration had 97 inspectors for some 90,000 plants. It is just ridiculous to expect the people over at Food and Drug to carry on their responsibilities with that kind of a staff in an area which is so vital to the people of this country.

So I hope that you will see fit to restore, as the House did—and I believe that is a new experience for you.

Some people say, Senator, that this will break the balanced budget concept. It need not do so. My philosophy is that the Congress must decide between the important things, not the desirable things, but the important things, which directly affect the health of the Nation. We must separate the wheat from the chaff, if I may use that comparison.

Senator HILL. And you would certainly classify this as an important item, would you not?

Mr. MINTENER. Absolutely. It is an essential item. It is a necessary item if the health of this country is to be adequately protected.

HEALTH RESEARCH ACTIVITIES

Second is the important area of health research facilities. As I have told you before, I think that this is one of the most important programs the Federal Government has ever entered. I had the honor of working on this legislation and was one of the four laymen on the advisory council to the Surgeon General, which already, during the first 3 years of operation, has built a considerable number of health research facilities in this country. And it is an interesting thing that the appropriations have been matched in a ratio of about 5 to 1.

Senator HILL. The law requires only 1 to 1, or 50 percent.

Mr. MINTENER. That is right.

Senator HILL. But as you say, the \$1 Federal, instead of being matched by another dollar, has been matched by \$5.

Mr. MINTENER. That is right, sir. And this is across the board, in all the disciplines, and I think includes everything but chiropractors.

Now, already I believe that a tremendous contribution has been made to the health research of this country by what we have done so far. You will recall that we asked for \$50 million a year for 5 years, including teaching facilities. The \$20 million was cut out, and you gave us \$30 million a year for 3 years. I personally believe that was a mistake, because I go around the country visiting these applicants' premises. I find that it is absolutely impossible to differentiate precisely between research and teaching, and I hope some day that will be restored.

But I do feel that it would be a tragic mistake if the \$30 million that you have given us for the first 3 years of the operation of this program were not continued for another year.

FUNDS FOR GALLAUDET COLLEGE

The last item I would like to speak about is Gallaudet College. Here I would like to go on record and thank you and your committee for the tremendous help you have been to us out at Gallaudet College. You have been a sympathetic booster and implementer of our home and have been of tremendous help to us, and I want to express my own appreciation and, I am sure, that of the Board of Trustees.

We are in the fourth stage, as you know, of the building program out there. And Gallaudet College, when this program is completed, Senator Hill, will undoubtedly be a world famous center for the teaching of the deaf. It is the only college for the deaf in the world today. And when this building program is completed, it will be that much greater.

Several items have been cut out. The auditorium, the classroom and dormitories for Kendall School, which is the primary and the lower school out there, the greenhouses, which are necessary, the athletic fields, the maintenance group building, the maintenance group personnel apartments, and outside services. So if we could restore about \$2 million to that project, we would be back on the track and help get Gallaudet this fourth stage of the program.

You will recall that \$55,000, because of increased costs, were taken from the student center and given to the completion of the men's dormitory. And I would like to see that restored, because we are already 1 year behind on this program, and if we do not get the appropriation this year, we are going to be 2 years behind. And I think that would be a great mistake.

So, in the food and drug area, I would like to see you restored the \$2 million, as the House has done. I would like to see the \$10 million go back to the health research facility appropriation, and the \$2 million to Gallaudet.

Senator HILL. The House restored the \$10 million, too, as you know.

Mr. MINTENER. That is right, sir.

Senator HILL. We certainly appreciate your presence here, and this very splendid testimony. We know the authority with which you

speak and your deep personal interest in these programs, and we are delighted to have had you here, Mr. Mintener.

MR. MINTENER. I want to thank you for your past support, and I am sure it will continue.

Senator HILL. Thank you, sir.

COMMUNICATIONS

I have received letters from Mr. Howard O. Hunter, of the American Institute of Baking, Chicago, and from Mrs. Dorothy Johnson, of the American Home Economics Association, Washington, D.C., in support of increased funds for the Food and Drug Administration. These letters will be included at this point in the record.

(The letters referred to follows:)

AMERICAN INSTITUTE OF BAKING,
Chicago, May 19, 1959.

HON. LISTER HILL,
U.S. Senator,
Senate Office Building, Washington, D.C.

DEAR SENATOR: I understand that your subcommittee is holding hearings on the Food and Drug Administration budget for the next fiscal year.

I had the privilege of testifying on the budget before the House Appropriations Committee and was pleased to find out that the House increased the Food and Drug Administration's request by \$2 million.

In my opinion even this is inadequate for the tremendous responsibilities they have in protecting the consumer.

Many of us in the food industry have had long experience with the Food and Drug Administration and feel that their personnel is of the highest ability, integrity, and dedication.

It is not often that people praise the policemen, but in this case we feel that if the Food and Drug Administration is to perform its major function of protecting the consumer, and working constructively with industry, they obviously must be adequately financed.

I think this is one of the lowest budgets in dollars of any Federal agency and yet, perhaps, has the most responsibility.

The American Institute of Baking, which has as its members more than 80 percent of the wholesale commercial baking industry, is very much in favor of adequate appropriation for the Food and Drug Administration.

Sincerely yours,

HOWARD O. HUNTER.

AMERICAN HOME ECONOMICS ASSOCIATION.
Washington, D.C., May 8, 1959.

Senator LISTER HILL,
Chairman, Subcommittee on Labor and Public Welfare, Senate Committee on Appropriations, U.S. Senate, Washington, D.C.

DEAR SENATOR HILL: The American Home Economics Association for many years has supported the Food and Drug Administration in its enforcement of the Food, Drug, and Cosmetic Act. An increasing variety and use of new chemicals in food, drugs, and cosmetics, together with a rapidly expanding market, and a growing population, have resulted in additional administrative costs. The increased costs have not always been offset by an increase in appropriations. The passage of the chemical additives amendment by Congress in 1958 increased the responsibilities of the Food and Drug Administration.

Since the function of the administration is to safeguard the health of the public in areas covered by the act, it seems of utmost importance that sufficient funds be provided to guarantee the broadest and best enforcement possible. The President's budget of 1960 includes an appropriation of \$11,800,000. This amount does not cover funds for new personnel needed to carry out the chemical additives amendment and other increased services. The bill approved by the House of Representatives recognized this fact and added an increase of \$2 million.

The AHEA commends the House for its recognition of this need and hereby requests the Subcommittee on Labor and Public Welfare of the Senate Committee on Appropriations to concur on the action taken by the House and appropriate the sum of \$13,800,000 for the appropriation of the Food and Drug Administration.

We ask that this statement be included in the record.

Respectfully submitted.

Mrs. DOROTHY JOHNSON,
Chairman, Committee on Legislation.

COMMUNICATION

Senator HILL. Miss Chloe Gifford, president of the General Federation of Women's Clubs, Washington, D.C., has requested that her statement in support of increased funds for the Food and Drug Administration be included in the record. Her statement will be inserted at this point.

(The statement referred to follows:)

STATEMENT OF MISS CHLOE GIFFORD, PRESIDENT, GENERAL FEDERATION OF WOMEN'S CLUBS, WASHINGTON, D.C. ON APPROPRIATIONS FOR THE FOOD, DRUG AND COSMETIC ACT

The General Federation of Women's Clubs is an organization which was chartered by the U.S. Congress in 1901. The membership consists of more than 5 million women in the United States, which includes the wives and mothers in a cross section of persons in local communities.

The activities of the general federation are set out by resolutions passed at national conventions. These resolutions are proposed by the State federations before they go to national conventions for action; therefore, what we say here is the result of democratic action of the membership of the general federation.

The membership of this organization has always been concerned with the health and welfare of their families, and is given credit for having been influential in the establishment of the Pure Food and Drug Administration of the United States.

The General Federation of Women's Clubs is interested in the consumers health. We know that the members of the 86th Congress are equally interested as they also are consumers.

The General Federation of Women's Clubs realizes that the Pure Food and Drug Administration does an excellent job with the funds they have for administration, and with the staff available. The reasons why we support their efforts are obvious.

However, the members of our organization whose chief interest it is to protect the health and welfare of their families know that the work of the Pure Food and Drug Administration increases almost daily. The new drugs, pesticides, food additives, etc., which come on the markets are ever increasing. To properly handle this vital work means that many experts and scientists are necessary. We know too that many experts can and do get greater compensation for their services with private industry. We feel that it is a Government responsibility to provide a sufficiently qualified staff to properly perform their duty, which is to protect the people of our country.

I should like to point out that the General Federation of Women's Clubs passed a resolution in 1904, and often since reaffirmed, which sets out clearly what we believe is needed.

Pure Food, Drug and Cosmetic Act (convention 1904, reaffirmed, 1950) :

"Whereas the Pure Food, Drug and Cosmetic Act, passed in 1906 and amended in 1938, has proved of inestimable value to the American people in safeguarding their health by protecting them against adulteration and misbranding; and

"Whereas from time to time efforts have been made to weaken requirements of the Food, Drug and Cosmetic Act : Therefore

"*Resolved*, That the General Federation of Women's Clubs reaffirms its endorsement of the principles of this act and urges the strengthening of its provisions for consumer protection."

Also, the General Federation of Women's Clubs has consistently watched legislation regarding food additives. We have worked for laws requiring proper inspection and sufficient testing of any food additive over a period of time long

enough to get complete assurance that consumption of food in which additives are used is safe for human consumption.

All women with families are interested that the Pure Food and Drug Administration have sufficient funds in order to do a thorough job. We know the act says—processors of food where additives are used must do the inspection required—but we are aware that the Pure Food and Drug Administration is responsible to the people and, therefore, needs funds to do the things necessary to insure the people the foods they eat are safe for consumption.

The general federation also knows that the Pure Food and Drug Administration has many other areas in which they are responsible to the people. That is to say, in the drug and cosmetic fields. We likewise want a good job done in these areas. We know this work takes a lot of money, and we also have a resolution on economy in Government. We heartily endorse this principle, and we set out that the American people should be willing to make some sacrifice in order to support the needed economy in Government. But we do say that it is false economy to sacrifice the health and welfare of the people.

We, therefore, sincerely urge the 86th Congress to make the appropriations needed by the Pure Food and Drug Administration to properly administer the act.

Senator HILL. Mrs. Lucille Harris?

Mrs. Harris, we are glad to have you here.

Do you want to put your statement in full in the record at this point?

WASHINGTON COMMITTEE FOR A SANE NUCLEAR POLICY

STATEMENT OF MRS. LUCILLE HARRIS, REPRESENTATIVE

HEALTH HAZARDS OF RADIATION

Mrs. HARRIS. Thank you.

My name is Lucille Harris. I am a native and lifetime resident of Washington, D.C. I am here today to present the Washington Committee for a Sane Nuclear Policy, and particularly those members who are mothers of young children. I have a 13-month-old son, and expect my second child in August.

This is the first time I have ever appeared before an agency of Government.

I have asked for this opportunity because of worry over the health hazards of radiation. We hear many conflicting stories about the so-called permissible dose of strontium 90. We hear conflicting estimates of the number of deformed children which radioactive fallout from H-bomb tests will produce in future generations.

To end this confusion, the public needs more information. This information should be based on more research by an agency primarily interested in protecting the Nation's health. Such an agency is the Public Health Service. The Public Health Service deserves enough money to do the kind of research job needed to set up realistic standards of radiation safety.

I can assure you that a pregnant woman's normal fears are multiplied by the thought that her unborn child might be deformed by invisible particles coming from bombs manufactured and tested by her fellow men.

I cannot tell you what a mother of growing children goes through when she wonders whether she is poisoning her child with radioactivity every time she gives him a glass of milk or a piece of bread.

We are not reassured by the National Committee on Radiation Protection's recent doubling of the permissible level of strontium 90,

when we learn that the International Commission on Radiation Protection had recommended otherwise.

We are not reassured by the Atomic Energy Commission's method of averaging fallout over the entire surface of the earth, when we learn that fallout comes down more heavily in some regions, especially the United States, than in others.

We are not reassured by the AEC's statement that we do not have to worry about high levels of radioactivity in wheat because Americans consume relatively little grain. Other foods are known to be radioactive. There should be regular studies of radioactivity in all food products.

We are not reassured by the AEC's use of the term "sunshine units" to measure harmful radiation. A poison by any other name is still a poison. And no scientist has denied that, at least as far as heredity is concerned, all radiation is dangerous.

REQUEST FOR INCREASED FUNDS FOR RESEARCH

We believe that the Subcommittee on Appropriations for HEW can make an immediate and outstanding contribution by voting to increase greatly the Public Health Service budget for radiation research.

The Public Health Service now has a very modest budget for cancer research. Why can't this agency receive half or two-thirds as much additional money to study radiation, a health problem with at least as many unknowns? Even if H-bomb tests are stopped forever, fallout will be coming down from the skies through the 1970's. The growing use of radioactive materials in research and development, manufacturing, medicine, and food processing is added to the radiation to which we are exposed.

We are going to have to learn to minimize the amount of radiation to which we will be exposed. We urge you to approve the funds needed to study its effects on human beings and to set up safety standards in which we can have some confidence.

We urge you to approve the funds needed to train qualified people in enforcing new safety standards. Training takes time. The money is needed now.

Thank you very much for the opportunity to appear before this subcommittee.

Senator HILL. We are glad to have had you here.

As you heard me say a few moments ago, we had hearings on this matter of the dangers of radiation before our Senate Committee on Labor and Public Welfare last Thursday and Friday. And you have certainly given your thoughts and your consideration to a most important matter now before the Congress. It is most important.

And we want to thank you for coming and making this statement. We appreciate it very much.

Mrs. HARRIS. Thank you.

Senator HILL. Dr. Joseph Stocklen.

Doctor, we are glad to have you here with us, sir.

NATIONAL TUBERCULOSIS ASSOCIATION

STATEMENT OF DR. JOSEPH B. STOCKLEN, REPRESENTATIVE

CUT IN FUNDS FOR TB CASE FINDING

Dr. STOCKLEN. Thank you, Senator Hill.

Mr. Chairman, I have submitted a written statement, and I would like to briefly summarize the important points in this statement in the interest of saving time.

My name is Joseph B. Stocklen. I am a doctor of medicine. My official position is tuberculosis control officer for Cuyahoga County, which is the metropolitan area of Cleveland. I am a member of the board of directors of the National Tuberculosis Association, and my statement represents the views of this organization.

Just as background, I am sure you are aware that in 1958 the Federal Government appropriated \$4½ million to States for tuberculosis case finding and prevention. Last year only \$4 million was appropriated for this purpose.

For the coming fiscal year, \$3 million is proposed for this purpose. It is most difficult for us to reconcile this decrease in expenditures with the known facts. There are an estimated 40 million Americans infected with tuberculosis today. We know that tuberculosis now is occurring not as a serious infection when the people get it. That is, a clinically significant disease does not occur when the people get it. But rather, the new cases are occurring among those older people who have been infected many years ago. And so this represents a vast reservoir of potential infection.

In 1958, we estimate—the official figures are not available yet—there will be 12,000 deaths caused by tuberculosis. We estimate that there will be 60,000 new cases of tuberculosis reported. In 1958, approximately \$800 million was spent for the care of the tuberculous.

SPENDING BY STATES INCREASING

Despite the fact that the tuberculosis death rate and case rate had been declining, the amount of money spent by the States has been increasing. Someday we are going to come to a place where these expenditures will decline very markedly; but we have not yet reached that place. And so we have a picture in which the States are spending more and more money, but the Federal Government is spending less.

Now, since these grants to States are by law used only for case finding and prevention, it would seem to us to be the poorest kind of economy to reduce this Federal budget.

As the tuberculosis problem diminishes, the cost of finding cases becomes more and more expensive. When there are a lot of them in the population, it is easy to go out and pick them up; but now that they are getting rarer, it becomes a much more difficult job. Last year in my community we X-rayed 300,000 people in an attempt to find tuberculosis. Now, the cost of finding one case by this method was \$600 a case. This has increased four or five times since I first went into this business, 25 year ago.

INCREASES IN CASE RATE

We find such differences as this: In one of our wealthy suburbs, the new case rate is only 9.9 per 100,000 X-rays taken, while in a very depressed segment of the population, the new case rate is 1,000 per 100,000. I think that this case rate would compare very favorably, or I might say very unfavorably, with that given by the two distinguished Senators from Alaska. I was in Alaska 5 years ago on Dr. Parran's health study there, and was interested in their testimony.

I might say, as an aside, I have not talked with them before this, but everything they said was certainly appropriate. A terrific job has been done. We just hope that in the rest of the United States we can continue to have appropriations which will permit us to complete this job.

Senator HILL. Certainly this is no time to weaken our efforts; is it?

Dr. STOCKLEN. It certainly is not, sir.

We hope, we certainly hope, we can just have these appropriations for a few years longer until we are warranted in decreasing our case finding, our hospitalization. We believe that this is the most successful of all public health movements, and we do not believe, because it has been successful, that it should be penalized by having decreased appropriations.

Senator HILL. Tuberculosis is still the most contagious major disease, is it not?

Dr. STOCKLEN. That is right, sir. It is the biggest cause of death among all the contagious diseases, and it still costs the tremendous sum in this country of \$800 million a year.

NATIONAL HEALTH SURVEY

Now I would like to go on to another point. The Congress is to be commended for initiating the health survey of I think 2 years ago. The results of this study I think could be very far reaching. We believe very much in planning. We believe there is a great deal of room for planning in medical care. We have seen, for example, the hospital construction plan, what a tremendously progressive program that has been. We believe if planning in the health field could go further, we could evolve another plan which would be of as great consequence as the hospital planning has been to this Nation.

NEED FOR PHYSICAL EXAMINATION IN STUDY

However, this is an interview type of study, and I believe that many authorities are convinced that if a physical examination could be added to this study, it would provide a check for the study and would greatly increase its value.

We believe that a tuberculin test should also be added to this physical examination.

It is our understanding that this would cost about \$400,000, and we recommend strongly that this additional \$400,000 be appropriated to make this study more useful.

The Congress and the Public Health Service are to be commended for the vast improvement in the health of the American Indian resulting from the augmented health program of the past several years. We hope the gains made can be consolidated by gradually increasing

expenditures to the level of \$60 million recommended in the special report to Congress 2 years ago.

On behalf of the National Tuberculosis Association and myself, I want to thank you, Senator, for permitting me to appear before you and give this testimony.

Senator HILL. The National Tuberculosis Association is certainly to be strongly commended for the campaign it has carried on and the war it has waged against tuberculosis through the years. It has been in existence now 40 or 50 years; has it not?

Dr. STOCKLEN. That is right, sir. It was started in 1904.

Senator HILL. Founded by Dr. William Osler at the time he was at Johns Hopkins Medical School. And the association has done a wonderful job. I certainly would not want to see anything done that would weaken the warfare that we are making on this dread disease.

We certainly appreciate your coming here today, sir.

Thank you very, very much.

Your statement will be included in full in the record.

(The statement referred to follows:)

STATEMENT OF THE NATIONAL TUBERCULOSIS ASSOCIATION BY DR. JOSEPH B. STOCKLEN

The 1959 Federal appropriation for tuberculosis grants to States was a reduction of \$500,000 from the 1958 level of \$4,500,000. This 11-percent reduction was made at a time when more than two-thirds of the State legislative bodies were not in session. This means that, even if they were so inclined, these State legislatures were unable to make up the deficit resulting from the reduced Federal grant. The proposed appropriation for 1960 is a further reduction of \$1 million to a total of \$3 million.

Although Federal moneys appropriated for the total tuberculosis program are minimal compared to the amounts spent by States, they are expended by the States for one of the most significant aspects of the total control and preventive programs. They are used primarily for X-ray case finding and contact tracing, public health nursing, clinics, and laboratory services. These are preventive measures that will break the vicious chain of infection; they are the most effective means of bringing the disease under control in this country and are showing gratifying results.

We fear that a false sense of security has developed in the minds of the public because of the reduced number of patients in tuberculosis hospitals at any one time, and because of the downward trend of tuberculosis mortality. We should like to point out that present-day methods of tuberculosis treatment have reduced the length of hospitalization of the patient but increased the outpatient clinic followup of tuberculosis cases, thus increasing the cost of control and prevention programs for States and communities. In past years a large portion of the funds expended by the States for this purpose have been made available by the tuberculosis grants to States.

Even if the State legislatures that are in session this year increase their appropriations to offset the decrease made a year ago in the Federal tuberculosis grants to States, it is too late for them to absorb this second reduction. Because of the increased costs, States will not be able to expand their tuberculosis-control activities; on the contrary, many States will have to reduce the number of their clinics and curtail their tuberculosis case-finding activities.

Therefore, the National Tuberculosis Association, through its board of directors, strongly requests that the appropriations for tuberculosis grants to States be restored to the 1958 level of \$4,500,000 for the fiscal year 1960. We were greatly distressed to learn that the House of Representatives went along with the administration's appropriations request, and we fear that will create hardships on the tuberculosis control programs throughout the Nation.

In connection with research which the National Tuberculosis Association is supporting, we should like to bring you up to date on a project reported to you last year by Dr. Walsh McDermott while testifying before your com-

mittee in behalf of the National Institute of Allergy and Infectious Diseases. This is a blood test for determining activity of tuberculosis developed by Drs. Robert C. Parlett and Guy P. Youmans of Northwestern University School of Medicine, Chicago, Ill.

Since Dr. McDermott spoke before your committee, 20 hospitals all over the United States have cooperated in a broad-scale study designed to find out how practical this test will be as a laboratory procedure in diagnosing tuberculosis. The hospitals have sent in samples of blood serum from tuberculosis and non-tuberculosis patients for "blind" testing by the Parlett-Youmans method; that is, the investigators do not know the source of the blood. The sample carries a number only. Drs. Parlett and Youmans are now preparing data on approximately 1,000 samples.

The primary reports concerning this important diagnostic technique are encouraging, and any practical application of this test must be made by the States. This will require additional funds in the case-finding activities of the States. We hope that appropriations for grants to States can be maintained at a high level to facilitate the States' use of this new diagnostic technique, as well as maintain existing case-finding programs and followup.

The Public Health Service, through its tuberculosis program, is now engaged in important research in what has come to be known as the isoniazid prophylaxis trials. This study may have far-reaching effects on the control of tuberculosis.

The board of directors of the National Tuberculosis Association recommends that this research, together with the other vital work of the direct operations section of the Public Health Service tuberculosis program, be continued and supports the Public Health Service's request for an appropriation of \$2,452,000 for this purpose, and the House of Representatives concurred.

Your committee has heard testimony relative to the needs for an expansion of the health survey authorized by Congress some 3 years ago. The interview portion of the survey is progressing very well and extremely valuable data has resulted. A second and most logical step was requested by the Department of Health, Education, and Welfare, but denied by the Bureau of the Budget. This step would have entailed the appropriation of approximately \$350,000 for the conduct of health or physical examinations of a representative sample of the population. It would appear to the National Tuberculosis Association that it was the intent of the Congress, when authorizing this survey program, that full and complete data were desired. We do not believe that such can be expected in the absence of the health examinations program, and strongly urge this committee and the Congress to authorize an additional \$350,000 for this purpose under the item, "Salaries and expenses, Public Health Service."

We would further direct your consideration to the advantage of incorporating, as a part of the health examination, a tuberculin testing technique. There is, at the present time, almost a complete absence of reliable information as to the level of prevalence of the incidence of tuberculosis in the United States. Surveys have been conducted, in numerous parts of the country, in an attempt to obtain this information, but such attempts have been conducted primarily among the younger age group. An additional and valuable study has been conducted among Navy recruits, but this again is in a single age group and could not be considered representative of the entire population.

We believe that, by incorporating the tuberculin test procedure within the health examination protocol, vital information would be forthcoming within a period of 2 to 4 years as to specific and definitive needs toward the final eradication of tuberculosis. Present attempts to evaluate the remaining problem are, at best, educated guesses and the National Tuberculosis Association sincerely requests the interest and support of the Congress and the Public Health Service in this endeavor.

The National Tuberculosis Association, continuing its concern in the health and welfare of the American Indian, was pleased to observe the advances made this past year by the Division of Indian Health of the Public Health Service.

Because tuberculosis is a major health problem among the Indians, the tuberculosis control program has been given special emphasis in this Division's program activities. Since 1954, the last full year prior to the transfer of the Indian health program from the Bureau of Indian Affairs to the U.S. Public Health Service, the number of newly reported tuberculosis cases among Indians in the United States has dropped 25 percent, and the tuberculosis death rate has dropped 40 percent. In Alaska, where the tuberculosis problem was particularly acute, deaths from this disease have been cut by 63 percent accord-

ing to the 1957 provisional figures. In the area of case finding, we are impressed to find that in 1958 a substantial proportion of the Alaskan natives have received chest X-rays. The National Tuberculosis Association believes that this is a most impressive record and further believes that the Division of Indian Health should receive special commendation.

This progress becomes even more admirable when one notes that this program has been operating for 3 years at essentially the same budget level. Our association notes that the drop in the tuberculosis death rate and the newly reported tuberculosis case rate is leveling off, which would indicate that the initial attack is over and that the battle has settled down in earnest. This means it will become increasingly more expensive to find and treat new cases of tuberculosis and to supervise the old cases. Our association is delighted to learn of the great strides made in the construction of the much-needed hospital and clinic facilities for the American Indians and hopes that continued funds will be made available for new construction and for modernization of existing facilities. With each new or expanded health facility comes an additional drain on the program budget for staff, services, and maintenance; we do not see how these increases in costs can be met if the budget remains constant.

The board of directors of the National Tuberculosis Association, realizing the demonstrated health needs of the Indians and the Division's responsibility to conduct a program consistent with these needs, recommends that an appropriation of \$48 million be made for direct operations of the Division of Indian Health of the Public Health Service for fiscal 1960. We were pleased to note that the House of Representatives saw fit to increase the appropriations request from \$43,500,000 to \$45,500,000, but we feel the full \$48 million is necessary to carry out an adequate program.

The National Tuberculosis Association wishes to express its approval of the House of Representative's action in approving an appropriation of \$4,587,000 for construction of additional Indian health facilities.

The National Tuberculosis Association is deeply appreciative of this opportunity to present to this committee the above information in respect to matters of vital interest to the health of the American people.

STATEMENT OF SENATOR HUMPHREY

Senator HILL. Senator Humphrey had directed a letter to me in support of an appropriation of \$4.5 million for tuberculosis control grants. This letter will appear at this point in the record.

(The letter referred to follows:)

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
May 13, 1959.

HON. LISTER HILL,
*Chairman, Subcommittee on Labor and HEW,
Committee on Appropriations,
U.S. Senate.*

DEAR SENATOR HILL: I am concerned that for the past few years the administration has recommended cutbacks in the tuberculosis control program administered by the U.S. Public Health Service. The 1960 budget requests only \$3 million for Federal grants to States for tuberculosis control; this is \$1 million less than was requested for fiscal 1959, and is nearly \$1.5 million less than was actually appropriated for fiscal 1958.

These cutbacks are not consistent with the need for maintaining this program at a high level, neither are they attuned to the national goal of tuberculosis eradication which requires positive planning and program developments on the part of both the States and the Federal Government.

I hope, therefore, that the Committee on Appropriations will see fit to increase this appropriation to at least \$4,500,000 for fiscal 1960.

I am happy to see that the administration has requested a realistic appropriation of \$2,452,000 for the direct operations and technical assistance phases of the tuberculosis control program. This request has my support, and I sincerely hope it has the support of the committee.

I will appreciate having this letter inserted in the record of the subcommittee's hearings on the appropriations bill for the Departments of Labor and Health, Education, and Welfare and related agencies for fiscal 1960.

Personal regards.

Sincerely yours,

HUBERT H. HUMPHREY.

LETTER FROM SENATOR CLARK

Senator HILL. Senator Clark has requested that a letter addressed to him by Dr. Julius L. Wilson, director of the Henry Phipps Institute of the University of Pennsylvania, in support of a request for an appropriation of \$4.5 million for tuberculosis control grants be included in the record. Dr. Wilson's letter will be inserted at this point.

(The letter referred to follows:)

THE UNIVERSITY OF PENNSYLVANIA,
THE HENRY PHIPPS INSTITUTE FOR THE
STUDY, TREATMENT, AND PREVENTION OF TUBERCULOSIS,
Philadelphia, May 11, 1959.

HON. JOSEPH S. CLARK, Jr.,
Senate Office Building, Washington, D.C.

DEAR SENATOR CLARK: In view of the continued serious problem of tuberculosis in Philadelphia and Pittsburgh, it is very disturbing to hear that the U.S. Public Health Service has requested only \$3 million for aid to States for tuberculosis control for the next fiscal year, and a sum which will result in \$100,000 reduction in support for the program in Pennsylvania. I urge that you do everything within your power to have this cut restored and the total raised to \$4,500,000.

The declining death rate in Pennsylvania is a result of improved living conditions plus a case fatality rate lowered by modern methods of treatment. However, this has resulted in an increased load on our outpatient clinics for tuberculosis all over the State and particularly in Pittsburgh and Philadelphia, due to the care needed for the survivors. For the time being, the total cost of care is higher than ever.

May I urge that continued Federal support in the shape of grants to States for tuberculosis control should in a few years go a long way not only to save lives but also to reduce suffering, disability, and resulting poverty.

Very sincerely yours,

JULIUS L. WILSON, M.D., *Director.*

COMMUNICATIONS

Senator HILL. I have received letters from Drs. Crawford F. Sams, of Atherton, Calif., and Sidney Raffel, of Stanford University, as well as Mr. Gardner Middlebrook, of the National Jewish Hospital at Denver, Colo., and Mrs. Alice Fordyce, vice chairman of the National Health Education Committee, Inc., of New York City, all advocating the use of BCG vaccine in the prevention of tuberculosis. These letters will be included at this point in the record.

(The letters referred to follow:)

MAY 1959.

Senator LISTER HILL,
Chairman, Senate Subcommittee on Appropriations for the Department of Health, Education, and Welfare.

DEAR SENATOR HILL: I should like to reemphasize certain points concerning tuberculosis control, about which I testified before this committee in 1956. Based upon some experience in controlling diseases in various parts of the world, I have had to evaluate current knowledge and scientific progress made in various fields of medicine pertaining to specific diseases in order to determine whether or not it was possible to prevent these diseases and to decide which was the most

feasible method of control applicable to the particular situation for which I was responsible at the time.

To me, the most frustrating thing in medicine is to have a patient present himself for treatment of a disease about whose etiology, prevention, and therapy we know too little; to have the patient present himself for treatment after the disease may have gone too far. In either case, there is little we can do in medicine except palliative treatment and watch the patient die. We still have too many such diseases. The only compensation such a situation offers for the medical profession is the challenge to try and find answers to these problems through research, thereby reducing the number of diseases with which we are faced, about which we can do nothing because we know too little. It is in such a field that I am presently engaged in research.

The next most frustrating situation in medicine, to me, at least, it is to have a patient with a disease, such as tuberculosis, about which we do know something, and to be faced with the problem of initiating therapy which may take a long period of time in order to arrest the course of the disease. The implications of the social problems created for that individual and his family are very great. Even if the therapy is successful, the individual may have to change his occupation. The expensive treatment and loss of income are such that his family suffers. Although assistance is given in such catastrophic illness, the personal and social tragedy cannot be alleviated by money alone. I say this is frustrating, to me, because it is like closing the door after the horse has left. I know that this was a needless tragedy. Tuberculosis can be prevented.

The most rewarding aspect of medicine to me is to keep people well. In a disease such as tuberculosis in which our medical knowledge has reached the point that we can carry out measures to prevent individuals and masses of individuals from acquiring this chronic, disabling disease, then our first and greatest effort should be in applying such measures. This is preferable to waiting for individuals to seek treatment after they are ill. This is true even when we have found fairly effective means of therapy. Although improved therapy has resulted in a great reduction in mortality among those cases which have acquired tuberculosis in this country, unfortunately, we have not made corresponding progress in preventing individuals from acquiring the disease in the first place. Our morbidity figures do not show the sharp reductions that our mortality figures do.

There has been a step-by-step change in attitude toward the use of BCG as a preventive for tuberculosis within the last 12 years in this country. The accumulation of evidence, unfortunately most of it obtained in other countries, has been so overwhelming that a series of steps has been taken since 1947 by various agencies within this country to recognize that BCG is a valuable method of preventing tuberculosis. In 1947, these agencies almost unanimously held that BCG could not prevent tuberculosis and was a dangerous biologic. However, first the Trudeau Society, the scientific group of the antituberculosis association, accepted the fact that BCG could prevent tuberculosis in a high percentage of cases. The second group to change was a special advisory council to the U.S. Public Health Service that BCG was an effective preventive and should be used. This has taken time. However, to me, this means real progress.

It is not easy to change the attitude of a profession, that is, my own profession, and the attitude of official and semiofficial groups who establish policy pertaining to medical matters. However, this is now accomplished. In the meantime, each day, each month, and each year, we continue to have in this country of ours thousands of people acquiring tuberculosis. To me, this is a tragedy because it is unnecessary in terms of human suffering of the individual, suffering and worry of the individual's family, and economic loss to the family, the community, and the Nation.

Today, the present accepted policy is that BCG is an effective preventive of tuberculosis and should be used among those groups who are exposed in areas of high incidence of tuberculosis. I, personally, am not content with such a policy. I should like to see the day in this country when tuberculosis as a threat to our population is reduced to the level of smallpox or some of the other communicable diseases. And it can be done. I should like to see the day in which every infant is routinely immunized against tuberculosis by our pediatricians at the same time he is immunized against smallpox, tetanus, and whooping cough. When that day comes, tuberculosis will no longer be a major health problem in this country.

I realize that such an ultimate goal cannot be reached overnight, but it will never be reached unless progressive steps toward that goal are taken. These steps involve continuing research in two major fields.

First, we can never be satisfied that we have found the ultimate answer in any biologic until we have been able to prevent the occurrence of a disease in 100 percent of those who are exposed. Today this is not true in BCG or in any other vaccine. Therefore, in the case of tuberculosis and BCG we must continue our research to improve its effectiveness and, if possible, to find other and better vaccines.

The second form of research is to use the existing BCG vaccine under carefully controlled statistical conditions in various segments of the population to determine the variables in environmental conditions and their impact on this particular program when applied. Environmental conditions do have an important impact on any health program, including immunization program.

Therefore, I strongly recommend that adequate funds be made available for the support of such research in tuberculosis control.

Respectfully yours,

CRAWFORD F. SAMS, M.D.

MAY 1959.

Senator LISTER HILL,
Chairman, Senate Subcommittee on Appropriations for the Department of Health, Education, and Welfare, New Senate Office Building, Washington, D.C.

DEAR SENATOR HILL: I would like to submit the following statement on the value of vaccine prophylaxis for the eradication of tuberculosis for the consideration of your committee.

Even in the face of a declining mortality and a more slowly declining morbidity from tuberculosis in the United States as a whole, it is still reasonable to suggest that the process of elimination (as opposed to control) of this disease will require a method which is able to prevent infection rather than to cure it once it has occurred. The reason for this viewpoint is quite apparent: If we rely upon cure as a deterrent to the further spread of the infection in the population, we are left always with a number of cases in which the patient has already spread tubercle bacilli before therapy has begun. If, on the other hand, appropriate segments of the population have been vaccinated, there is resistance to such spread, and the bacillus has no place to turn for further territorial expansion. This epidemiologic principle is best illustrated by the use of the vaccine for smallpox. An adequate program here has reduced to a very low point the opportunities for the smallpox virus to get a foothold in our population.

The vaccine usable for tuberculosis at the present time is BCG (bacillus of Calmette and Guérin). This is not an ideal vaccine; it is not as good as that for smallpox, but its usefulness has been demonstrated in human beings on a number of occasions in extensive and well-controlled studies, and most of these studies indicate that its efficacy is about on a par with the Salk vaccine for poliomyelitis. There is no one today who would suggest that our population be blanketed with this vaccine in an effort to eradicate tuberculosis; this would be unnecessary and undesirable. However, there are certain groups and areas of the country in which such vaccination could be helpful—groups including those who deal more intimately with the disease is most prevalent as in segments of major cities, and in smaller population areas where susceptibility and incidence of disease are both high.

For a variety of reasons there has never been a concerted effort to apply the vaccine in such groups and areas in this country. One reason has had to do with the safety of this living attenuated agent, but after almost 40 years and many millions of vaccinations it is apparent that this is as safe a biological preparation as one could hope to find. Rare unfortunate occurrences are seen with any agent, whether drug or biological, used in human beings. Other reasons are less obvious; for example, it has been repeatedly stated that vaccination causes the subject to become tuberculin positive and thus deprives the physician of a valuable test useful for diagnosis, but the populations considered as potential vaccinees are those in which the infection rate is high so that the diagnostic value of the tuberculin reaction is in any case considerably dulled.

A large amount of evidence now available on the subject seems to be overwhelmingly in favor of the use of this vaccine where indicated in addition to other methods currently in use for the control and therapy of tuberculosis.

Very truly yours,

SIDNEY RAFFEL, M.D.,

Professor and Executive Department of Medical Microbiology, Stanford University School of Medicine, California.

Senator LISTER HILL,

Chairman, Senate Subcommittee on Appropriations for the Department of Health, Education, and Welfare.

DEAR SENATOR HILL: On review of the recent annual hearings before the congressional Appropriations Committee of the Public Health Service tuberculosis control program, I feel that it is incumbent upon me as a citizen to express my disappointment at observing the minimal amount of discussion on the problem of the possibility of using vaccination with attenuated strains of tubercle bacilli, such as BCG, as an integral part of the Federal Government's participation in tuberculosis control in our country.

Specifically, I wish to go on record as disagreeing wholeheartedly with the conclusion drawn by some authorities from the U.S. Public Health Service control studies on the value of BCG vaccination in Puerto Rico and Muscogee County, Ga., and Russell County, Ala.

I think it fair to state that I was one of the first investigators to recognize that there has not been, until recent years, any such biological organism with uniform properties as is implied by the loose use of the term "BCG." Indeed, I studied, some 12 years ago, among other strains of BCG, the one which was employed in the Muscogee County trials, and predicted that this was a most inappropriate strain—one of too weakened virulence—for immunization purposes. Thus, the findings that vaccination of human beings with this strain resulted in little or no evidence of immunity came as no surprise to me.

I could write more about the complex problems of the biology of the various vaccination organisms which have been used for the purpose of immunizing experimental animals and human beings. Suffice it to state that the great mass of evidence from experimental animal and human studies, with biologically proper and clinically sophisticated materials cannot prevent anyone who is familiar with the history of immunization against infectious diseases from concluding that BCG vaccination of human beings can protect against tuberculosis. I would not pretend that it always does. The results thus far indicate that an 80 percent protection rate is perhaps all one can anticipate. It is certainly unnecessary to point out to this committee that this is as good as Dr. Salk's vaccination which is so widely accepted for immunization against poliomyelitis.

The only valid objection, which, in my opinion, militates against vaccination of every American citizen not already infected with tuberculosis (about two-thirds of our population) with the stable BCG vaccines, currently available in our country, is the fact that use of this vaccine renders the tuberculin skin test less useful for detecting new cases of natural tuberculous infection. Like several other investigators, my colleagues and I have been trying to devise a method of immunization against tuberculosis which would not present this disadvantage. Some preliminary results with experimental animals and with human beings suggest that the inhalation of BCG vaccine organisms by the airborne route may be one answer to this problem. In any event, where tuberculin skin testing is in fact not being carried out, for various economic, sociologic, or psychological reasons, for purposes of epidemiologic study, or for purposes of the application of isoniazid prophylaxis or treatment of early infection, there are no Federal funds requested by the U.S. Public Health Service for BCG vaccination programs.

It may interest you and the members of your committee to know that I wrote in 1954 to the then director of the tuberculosis program of the U.S. Public Health Service for approval of the study on isoniazid as a prophylactic agent against tuberculous infection and disease in the State mental hospital in Colorado. Therefore, I know you will understand why I support the current pro-

gram designed to study this possibility, as it is being carried out under the able direction of Dr. Carroll Palmer, of the U.S. Public Health Service. Nevertheless, I should like to point out that in my opinion such a program should not be considered alternative to, but only a supplement to, a broad program of BCG vaccination in areas of our country where the incidence of new tuberculous infection is high.

I do not understand this whole situation, because I do not understand why more than 500,000 American citizens are becoming duly infected with virulent tuberculosis germs every year, with no public health programs designed to prevent the disease which BCG vaccination is known to prevent.

Because of the above considerations, I urge that you inquire of all authorities at your disposal why funds are not requested for application of BCG vaccination on a systematic basis, consonant with the magnitude of the tuberculosis problem which still plagues the citizens of this, the wealthiest nation on the earth.

The New York Times of this morning, Thursday, May 28, carries an article in connection with BCG vaccination. I would appreciate it if you would be kind enough to include this article in conjunction with my letter, and as part of the record.

Respectfully yours,

GARDNER MIDDLEBROOK,
*Director of Research and Laboratories, the National Jewish Hospital at
Denver, Colo.*

[From the New York Times, May 28, 1959]

MASS PROTECTION AGAINST TB HINTED—BCG VACCINE FOUND TO GIVE IMMUNITY WHEN INHALED—CONVENIENCE STRESSED

(By Austin C. Wehrwein)

CHICAGO, May 27.—The possibility of mass immunization against tuberculosis by breathing BCG vaccine spray was suggested today.

BCG, the antituberculosis vaccine, is usually injected into the arm.

The suggestion was made in a paper read at the annual meeting of the National Tuberculosis Association at the Palmer House. The meeting continues through Friday.

The association also heard a debate on the relationship between smoking and lung cancer, tuberculosis, and other lung diseases.

The BCG experiments indicate that hundreds of thousands of people could be immunized in a theater while watching a motion picture, Dr. Gardner Middlebrook, director of research and laboratories, at the National Jewish Hospital in Denver, Colo., said.

The spray can neither be seen nor felt because the BCG particles are in a ratio of one to a billion parts of air. The BCG is introduced into a room through the ventilation system.

VACCINE STRETCHED

The paper was prepared by Dr. Middlebrook, Dr. Maurice L. Cohn, and Dr. Sol Roy Rosenthal, of the University of Illinois.

They said that tests on guinea pigs in Denver and on 30 patients at the University of Illinois aeromedical laboratory in Chicago had showed:

Inhalation of "nebulized" BCG, as opposed to the traditional vaccine method involving skin puncture, made it possible to stretch the supply. The same amount of vaccine needed to immunize 1 person with the old method could be used to immunize 1,000 persons simultaneously.

Inhalation had, in the tests made so far, none of the side effects experienced with the old method, particularly skin rashes and localized swellings.

Inhalation made possible followup skin tests for tuberculosis that are more difficult with the conventional injection method. This, it was said, meant that a closer check was possible.

Inhalation, because it required so small an amount of the vaccine, apparently did not have allergic side effects even on those who would be allergic to BCG injected in the conventional way.

NATIONAL HEALTH EDUCATION COMMITTEE, INC.,
New York, N.Y., May, 1959.

SENATOR LISTER HILL,
*Chairman, Senate Subcommittee on Appropriations for the
 Department of Health, Education, and Welfare,
 New Senate Office Building, Washington, D.C.*

DEAR SENATOR HILL: The following statement is respectfully submitted for inclusion in the hearings of the Senate Subcommittee for Appropriations for the Department of Health, Education, and Welfare, with special reference to the Public Health Service tuberculosis control program.

Many medical experts are convinced that the time has arrived and methods and procedures, although not perfect, are adequate and at hand, not only to control, but to eliminate tuberculosis in the foreseeable future as a serious public health menace in this country.

At the same time, however, we are deeply concerned about the considerable complacency and apparent misinformation that exists in many parts of the country concerning the job to be done.

Elimination can only be achieved by adequately, continuously, and relentlessly implementing a progressive and comprehensive program in high-incidence areas of tuberculosis on National, State, and local levels. It is the feeling of many medical experts and of interested and informed lay persons that such an all-out comprehensive program can and should be designed, and that it would eventually eliminate tuberculosis, not merely control it.

We are especially encouraged toward this end and purpose, partially as a result of the presentation of a very excellent paper on the elimination of tuberculosis by Dr. Johannes Holm, head of the Tuberculosis Division of the World Health Organization. This paper was presented at a meeting of the New York Tuberculosis and Health Association on November 18, 1958, and a few days later at the International Symposium on Tuberculosis in Philadelphia. The paper dealt at considerable length with the controversial question of the wider use of vaccination against tuberculosis, not only in the high-incidence countries, but also in the high-incidence areas of the United States. Dr. Holm's position, based on years of almost worldwide experience in tuberculosis, was that he strongly recommended the use of BCG vaccination as a preventative of tuberculosis infection.

His words on the elimination of tuberculosis, and on the use of BCG vaccination are as follows:

"We in WHO aim at eliminating tuberculosis as a public health problem. When, in a community, less than 1 percent of the children at 14 years of age are reactors to tuberculin (the WHO standard method for tuberculin testing being used), then the risk in this community of contracting a tuberculosis infection, and therefore also of contracting a tuberculosis disease, is so small that tuberculosis can no longer be considered a public health problem * * *.

"Having defined what we understand by the elimination of tuberculosis as a public health problem we now come to the big question of how we can achieve this aim.

"Basically there are today two measures which we can use to influence tuberculosis in a community, both of which are highly effective: BCG vaccination, and the use of the anti-tuberculosis drugs. The two measures, having quite different modes of action, supplement each other, and both should have their proper place in our tuberculosis program and should be applied correctly.

"I wish to emphasize that in WHO we have no doubt about the protective effect of a correctly performed vaccination, and that we consider BCG vaccination just as important for our tuberculosis control program as the use of the anti-tuberculosis drugs. I make a point of saying this because recently, following the publication of the results of two controlled trials conducted in the United States, doubts have been raised concerning the protective effect of BCG vaccination * * *.

"Possibilities do exist for carrying out successfully programs for the elimination of tuberculosis as a public health problem. However, considerable changes will have to be made in the existing so-called tuberculosis control programs in order to apply on a sufficiently large scale all the effective measures which are at our disposal today."

No one denies the validity of these statements, but the Public Health Service has not yet presented a program that begins with vaccination, and goes through all the other approved tuberculosis control methods of tuberculin testing, case

finding, isoniazid prophylaxis, and drug therapy, in the high-incidence areas of our country.

Many of our own medical experts, Senator Hill, are particularly concerned with the unsolved tuberculosis problem in high-incidence areas in many parts of our country, especially in the larger cities, and to some extent among certain groups outside the large cities.

We feel that the time is opportune now, not only to control, but to try and eliminate tuberculosis as a serious public health disease.

An all-out effort made at this time by the U.S. Public Health Service, together with coordinated activity by the private tuberculosis health groups, and by local and State health departments, could make this goal a reality.

I respectfully urge that you, Senator Hill, recommend that the Public Health Service design and carry out a program for the elimination of tuberculosis in this country.

When this has been accomplished, hundreds of thousands of our fellow Americans will be freed from the threat of this disease and will be able to work and pay the taxes which would in themselves offset the costs of such a program—to say nothing of the misery and death which we would also be eliminating with the stamping out of this preventable disease.

Sincerely,

Alice Fordyce, *Vice Chairman.*

Senator HILL. Dr. Russell E. Teague.

Doctor, we are very happy to have you here, sir.

ASSOCIATION OF STATE AND TERRITORIAL HEALTH OFFICERS

STATEMENT OF DR. RUSSELL E. TEAGUE, COMMISSIONER OF HEALTH OF KENTUCKY

GENERAL STATEMENT

Dr. TEAGUE. Thank you, sir.

Mr. Chairman and members of the committee, I am very pleased to appear before you here today representing the Association of State and Territorial Health Officers to discuss appropriations for the fiscal year 1960 in public health.

Ordinarily, the president of our association appears before this committee to give the views of all the State health officers, but, as you know, Dr. Gill, of Alabama, is attending the World Health Organization in Geneva, and I am very happy to represent him here.

I have a prepared statement, which I will turn in for the record, but I will briefly try to summarize, here, for you.

Senator HILL. All right. That is good, Doctor.

ADDITIONAL APPROPRIATIONS TO STATES

Dr. TEAGUE. It is our considered judgment based on day-to-day problems we face in protecting the public health of the people of our States which would prevent disease and lengthen life and improve health, that additional appropriations should be considered to States. Recommendations to that effect were considered and adopted at our annual meeting last fall.

Specifically I would like to make the following recommendations:

1. That funds be increased for the general health grant. This is the grant which we can use to initiate new programs, to finance extensions and expansions of our basic health services, to employ nurses, physicians, and other personnel who work in the city and county health departments throughout the country. Experience has shown that in-

creases in Federal grants for this program have a marked stimulatory effect not only on increased State and local activity, but also in increasing State and local appropriations for these purposes.

2. That funds for tuberculosis grants be increased at least to the 1959 level of \$4 million. While it is true that tuberculosis deaths are decreasing in the United States, and patient days of hospitalization are declining, the number of tuberculosis cases remain relatively stable and the shorter periods of hospitalization have resulted in increased workloads for local health personnel. Under these circumstances, we feel that a reduction of \$1,049,000 in the tuberculosis grant, as proposed by the President and passed by the House, it not only premature but may very well result in the necessity for even greater expenditure of public funds in the future.

In my own case, Kentucky, which I might cite as an example, our legislature only meets on a biennial basis. It would be impossible for me to get money to take up the slack as of July 1, 1959, in case this cut is given, and I would have to cut off two of my mobile case finding units in the State of Kentucky. I am sure many of my colleagues in other States are in the same position.

3. That funds for venereal disease control not be decreased from their 1959 level as proposed by the President, but that they be kept at the 1959 level in accordance with the House action. Here, again, much progress has been made over the last decade, but every time we relax our vigil and decrease our case finding activities, the incidence of venereal disease goes up. We feel that the public interest requires that no decrease be made in venereal disease control funds at this time.

4. That your committee support the increases which the House has passed for maternal and child health and for crippled children's services for 1960. These two important programs are critically in need of increased financing to take care of the rising costs for preventive medical care of our children.

5. That your committee continue to give support in 1960 for grant programs in the field of cancer control, heart disease control, and community mental health services. These are growing programs needed to counteract increasing health problems. More and more opportunities are opening up for application of research findings on a community-wide basis. States and community programs in these fields are expanding, and continued and increased Federal financial support will accelerate these developments with a resultant saving and prolonging of life.

6. That increased funds be made available for the Indian health programs so that the remarkable gains already achieved by the Public Health Service may be further increased and the level of health of American Indians be brought more nearly in line with that of the remainder of our population. Our association recommended that the appropriation for this program be raised to \$48 million for 1960, an increase of \$5 million over that recommended by the President and of \$3 million over that passed by the House.

LOCAL PREVENTIVE SERVICES

I should like to stress that organized preventive health services carried on through State and local health agencies are a national asset. They, therefore, merit continued and increasing Federal financial sup-

port in order that throughout the United States the advances in knowledge gained through research may be translated as rapidly as possible into practice. Everyday people become ill and disabled and die prematurely only because known preventive techniques have not been available to them. The economic loss alone which this Nation suffers thereby is many times greater than the costs of prevention.

REQUEST FOR HILL-BURTON CONSTRUCTION FUNDS

A part of our State and Territorial Health Officers Association is the State hospital and medical facilities survey and construction authority. I am chairman of this national organization. And in that capacity, I should like to urge that you appropriate for the coming fiscal year the full amount of \$210 million, as authorized by law, for what is commonly referred to as the Hill-Burton program.

As you know, this program is divided into two parts. Part C, with an authorization of \$150 million, is for hospitals and related facilities, and part G is for diagnostic and disease treatment centers, chronic hospitals, rehabilitation facilities, and nursing homes, with an authorization of \$60 million.

A great number of hospitals and other authorized facilities have been built under this program throughout the United States and its Territories. However, the increasing use of hospitals by the general public and the tremendous interest of communities in building additional facilities from which quality medical care can be provided, have stimulated an increasing demand for funds. Public Health Service officials have testified before the House Committee that State agencies report that over 2,000 projects now pending and costing a total of over \$2 billion could be approved if adequate Federal funds were available.

The demand for hospital and other medical facilities throughout the Nation is far in excess of the projects which could be constructed with the funds appropriated in previous years or requested this year. Accordingly, the State hospital and medical facilities survey and construction authorities on March 11, 1959, recommended to the Surgeon General of the Public Health Service that annual appropriations be sought in the full authorized amounts under parts C and G of the program.

These national problems are typified by the conditions which exist in Kentucky. We have constructed over \$88 million worth of facilities in the State since the inception of this program. We now have a backlog of applications of \$50 million worth of projects, awaiting funds for approval. Without funds to approve it, it tends to slow up, because they are waiting for the chance when their little town will be eligible for funds.

We are proud of this program, and we think it is one of the best public health contributions ever made.

I urge you, sir, and your committee, to support an appropriation of Federal funds in the full amount of \$210 million, as authorized by law.

I sincerely appreciate this opportunity of representing my association here. I am sorry Dr. Gill could not have been here to present it himself.

Thank you.

HEALTH TEAMS

Senator HILL. Doctor, what we have here is a health team composed of representatives of the Federal Government, your State governments through your State health departments, and then your local community health units. Is that not true?

Dr. TEAGUE. That is right, exactly. A partnership, I like to call it.

Senator HILL. And you cannot weaken the personnel or the participation on the part of the Federal Government without weakening the whole team. Is that not right?

Dr. TEAGUE. This is exactly true.

Senator HILL. It reaches right down into your local health unit?

Dr. TEAGUE. Especially when cuts are made and our legislatures or appropriating bodies at the State and local level are not in session and do not come into session for some time, it affects the program drastically.

Senator HILL. And you have no opportunity to repair the damage that might be done by these cuts, because you say your legislature is not in session, and the previous legislatures have acted on the basis that the Federal activities would continue as they have been doing.

Dr. TEAGUE. That is right. You know, many States have had their legislative sessions this year, and they are closed, and they did not make these appropriations for increase to pick up these costs, because they did not anticipate Federal cuts at this time.

Senator HILL. Doctor, I may say that we in Alabama are very proud of Dr. Gill. He is at the World Health Conference in Geneva, as you have said. We are sorry he could not be here. But I shall certainly tell him that he was well and ably represented here this morning.

We very much appreciate your presence, sir.

Dr. TEAGUE. Thank you, sir.

Senator HILL. Your prepared statement will be included in the record at this point.

(The statement referred to follows:)

Mr. Chairman and members of the committee, I am Dr. Russell E. Teague, commissioner of health of Kentucky, and I am appearing before you as the representative of the Association of State and Territorial Health Officers and in my capacity as chairman of the planning committee of the State Hospital and Medical Facilities Survey and Construction Authorities, concerning appropriations under the hospital and medical facilities survey and construction program.

The purpose of this presentation is to urge you to appropriate for the coming fiscal year the full amount of \$210 million, as authorized by law, for what is commonly referred to as the hospital and medical facilities survey and construction program. This program may be broken down into two categories commonly referred to as part C and part G of the program. Part C is entitled "Construction of Hospitals and Related Facilities," and an appropriation of \$150 million is authorized by law for this particular category. Part G is entitled "Construction of Diagnostic or Treatment Centers, Chronic Disease Hospitals, Rehabilitation Facilities, and Nursing Homes," and an appropriation of \$60 million is authorized for this category.

A great number of hospitals and other authorized facilities have been built under this program throughout the United States and its territories. However, the increasing use of hospitals by the general public and the tremendous interest of communities in building additional facilities from which quality medical care can be provided, have stimulated an increasing demand for funds. Public Health Service officials have testified before the House committee that State agencies report that over 2,000 projects now pending and costing a total of over \$2 billion could be approved if adequate Federal funds were available.

The demand for hospital and other medical facilities throughout the Nation is far in excess of the projects which could be constructed with the funds appropriated in previous years or requested this year. Accordingly, the State Hospital and Medical Facilities Survey and Construction Authorities on March 11, 1959, recommended to the Surgeon General of the Public Health Service that annual appropriations be sought in the full authorized amounts under parts C and G of the program.

The problems facing our Nation involving the need for this program are typified by the conditions which exist in Kentucky. Since the inception of this program, facilities have been constructed in Kentucky in all authorized categories. Many sections of our State have benefited from this program as regards their special needs. Careful consideration has been given in evaluating the financial abilities of our various communities to match Federal funds to meet any anticipated deficits of operation and the availability of sufficient technical personnel to operate the particular type of facility involved. We have given particular attention to the need for teaching facilities, especially teaching hospitals in medical centers and in schools of nursing operated by general hospitals.

I. KENTUCKY PROJECTS COMPLETED OR UNDER CONSTRUCTION SINCE THE BEGINNING OF THE PROGRAM TO JUNE 30, 1959

Under part C of the program since its inception there have been 132 projects completed or under construction in Kentucky. This adds 5,498 beds. The total cost of these projects was \$80,484,245.31, of which the Federal share was \$35,334,671.17. It is to be especially noted that \$14,636,189.11 was expended for the University of Louisville Medical Center, of which the Federal share was \$6,544,408.54; and that \$14,418,554 was expended for the University of Kentucky Medical Center, of which the Federal share was \$3,431,775.46. This adds 750 beds to the Louisville Medical Center and 546 beds to the Kentucky Medical Center.

Since the inception of the part G portion of the program, there have been seven projects completed or under construction in Kentucky. This adds 327 beds. The total cost of these projects was \$6,799,557.25, of which the Federal share was \$2,693,492.81.¹

II. KENTUCKY PROJECT REQUESTS FOR FUNDS UNDER PROGRAM FOR FISCAL YEAR BEGINNING JULY 1, 1959

In Kentucky, we have received requests for the next fiscal year under part C of the program for 95 projects involving 2,360 beds at a total cost of \$44,683,334, of which the Federal share would be \$22,341,667.

In addition, we have received requests in Kentucky under part G of the program for the forthcoming fiscal year for seven projects adding 323 beds involving a total cost of \$5,767,280, of which the Federal share would be \$2,883,640.²

The need for these projects in Kentucky, as well as throughout the United States and in our Territories, is great. All projects under this program are either publicly owned or owned by nonprofit organizations dedicated to alleviating human suffering. Many sections of Kentucky are desperately in need of better medical and hospital facilities. In fact, nine counties in Kentucky have only one physician and seven other counties have but two physicians. I would like to emphasize the fact that the building of new hospitals and medical facilities in rural communities stimulates physicians and other professional and technical personnel to locate in such areas. This is our only hope of ever providing adequate medical and hospital care for the citizenry of the rural sections of our country which are in such desperate need for medical services and facilities.

The people of our Nation are most thankful to you for the past appropriations which have been made to this program but the full intent of the law in stimulating the construction of such facilities, especially in areas where the need is desperate, has not as yet been fulfilled. The security of our Nation depends upon the health of our people and the health of our people depends upon adequate hospital and related facilities.

I urge you to support an appropriation of Federal funds in the full amount of \$210 million, as authorized by law.

¹ See exhibit A for a listing of the specific projects completed or under construction in Kentucky under part C and part G of the program.

² See exhibit B for a listing of the specific projects requesting funds under the program for the forthcoming fiscal year.

SUPPORT FOR PUBLIC HEALTH SERVICE PROGRAMS

STATEMENT OF RALPH C. PICKARD, STATE SANITARY ENGINEER,
DIRECTOR OF BUREAU OF ENVIRONMENTAL HEALTH, AND REPRESENTATIVE OF THE CONFERENCE OF STATE SANITARY ENGINEERS

GENERAL STATEMENT

Senator HILL. We will hear from Ralph C. Pickard, director, division of public health engineering, Kentucky State Department of Health.

Mr. PICKARD. Mr. Chairman and members of the committee, I am Ralph C. Pickard, State sanitary engineer of Kentucky and chief of the bureau of environmental health of the Kentucky State Department of Health. I am a full member of the Conference of State Sanitary Engineers from Kentucky. I am here today officially representing that conference upon request of Mr. Arthur N. Beck, of Alabama, who is chairman of our conference. The Conference of State Sanitary Engineers is composed of the chief engineers of the State health departments who are responsible for programs and activities that may affect the health and well-being of the people of this Nation.

Because of the closely allied working relationships of the Public Health Service programs and the State health department programs this conference always maintains an intense interest in the activities and programs of the Public Health Service. This is necessary since the State programs, in a great many instances, depend upon the Public Health Service for assistance in the evaluation of certain programs, certification of others involving interstate matters, for research, for training personnel, for expert consultant services, and in some cases for direct services.

PROGRAMS IMPORTANT TO STATES

I should like to limit my remarks to the following programs which are of the utmost importance to the State sanitary engineering programs:

- (1) Milk, food, and shellfish sanitation activities.
- (2) Air pollution control program.
- (3) Federal water pollution control program.

In addition to the statements which I shall make today, I should like to submit statements of position of executive board, Conference of State Sanitary Engineers, relating to each of the above programs.

Never before has public health had such an important role to play in the safeguarding of the health of our people. We in public health at all levels of government are daily engaged in efforts to combat health problems. Not only are we still faced with many of the older problems but we are becoming increasingly alarmed and concerned over now problems arising such as radioactive fallout, the presence of strontium 90 in milk, radiation hazards in industry, air and water pollution, and many others which are destined to be with us in increasing proportions. The changing technology of our times demands that we establish and expand such new programs as radiation, air pollution, et cetera, but we can ill afford to ignore the pressing needs for improving and expanding such established programs as milk, water, and shellfish sanitation.

In spite of the efforts of the Public Health Service in attempting to keep its programs ahead of public demands, we in the States constantly find that, under existing conditions, they are not able to supply the requests which we are constantly making to them.

SHORTAGES IN PERSONNEL AND FACILITIES

We, in many of the States, do not have the facilities nor the personnel which are needed to do research and evaluation of programs. Even if such were the case, it would neither be feasible nor economical for each of the 49 States to attempt such an effort in all cases. The Public Health Service must continue therefore to do this job in an accelerated fashion and to provide essential information and assistance to the States in the development and operation of control programs and in the training of technical personnel needed for such activities and programs.

CONTINUING NEED IN BASIC PROGRAMS

Although much has been written and said regarding the newer, more spectacular and worthwhile programs of air pollution, radiological health, water pollution, and others, we must not forget those basic programs which are still badly in need of support and expansion. Milk and food sanitation and the interstate carrier programs are still the foundations upon which many of our public health programs are built and their importance should in no way be minimized. One good example of this is the increased availability of shellfish throughout the country. Air shipments, improved refrigeration of common carriers, and improved storage facilities have now made it possible for shellfish to be found inland as well as at the seashore. We of the inland States have long recognized the importance of the protection of this commodity and the efforts of the Public Health Service to safeguard our health by its activities in this field. We must depend entirely upon the Public Health Service for this service from the producer to the consumer inclusive of its interstate shipment. Because of the many triumphs of the past in the sanitation field, we now simply assume that the job is finished.

I would remind you that those old problems have simply taken on a new look and increased vigilance in these matters is necessary. Many of these older programs must be given an added emphasis and prevention and control activity must be vigorously maintained and stepped up. In this respect, the Public Health Service program is in need of strengthening. We would, therefore, strongly urge that definite steps be taken to increase budgetary support and thereby strengthen the programs of the Public Health Service in milk, food, and shellfish sanitation so that it may fulfill its responsibility in this area of environmental health.

PREPARED STATEMENT

With regard to the above, I should like to submit the statement of position of Executive Board, Conference of State Sanitary Engineers, relating to the need for increased budgetary support for Public Health Service milk, food, and shellfish sanitation activities.

Senator HILL. We will be very happy to have that, sir.

(The statement referred to follows:)

CONFERENCE OF STATE SANITARY ENGINEERS

STATEMENT OF POSITION OF EXECUTIVE BOARD, CONFERENCE OF STATE SANITARY ENGINEERS, RELATING TO NEED FOR INCREASED BUDGETARY SUPPORT FOR PUBLIC HEALTH SERVICE MILK, FOOD, AND SHELLFISH SANITATION ACTIVITIES

Milk, food, and shellfish sanitation activities are important components of the total environmental health programs of State and local health agencies. For a long period of years, State and local health authorities have looked to the Public Health Service to provide them with leadership, technical assistance, and training in these activities. This type of assistance, in support of State and local programs, is necessary since the majority of the States lack the resources to conduct research, investigate the public health significance of new processes, products, and equipment, and to develop the technical methods and procedures essential to the conduct of effective milk, food, and shellfish sanitation programs.

The States have also requested the Service to participate with them in cooperative programs for the certification of the sanitary quality of milk and shellfish shipped interstate. The Service has undertaken to do this. These cooperative State-PHS certification programs have proven to be effective in providing consumer protection. They have also provided a basis for the establishment of uniform standards and application in both shipping and receiving States, and have been helpful to industry in both the interstate and intrastate sale of high quality products.

A gradual reduction in Public Health Service technical assistance and services to the States has been noted over the past few years. This curtailment has been especially noticeable in the services rendered through regional offices, and the States have been greatly concerned over the failure of the Service to provide the degree of help needed to meet complex problems. Currently, practically no assistance is provided the States in the area of food sanitation; less than the required number of spot checks and annual State shellfish sanitation program evaluations are being made; there are insufficient spot checks to insure uniformity of the interstate milk shipper program; and program guides are not being kept up to date.

Equally important is the failure of the Service to maintain consultant services adequately staffed to cope with emerging problems such as the increasing potential of bacteriological and radiological pollution in shellfish growing areas; paralytic shellfish poisoning; and the rapidly expanding food vending operations.

It has come to the attention of the Executive Board of the Conference of State Sanitary Engineers that milk, food, and shellfish activities of the Service may be even further curtailed in fiscal year 1960. It is our understanding that no increase in funds has been provided the milk and food program to cover the recent raise in commissioned officers' pay, and that supplemental funds currently made available from other sources to bolster research are to be withdrawn. We also understand that this will necessitate reducing the current level of operations to such an extent that the only solution may be to drop a major segment of the program and to further curtail regional consultant services to the States. Such action would be a serious blow to State and local health agencies who depend upon the Public Health Service for technical assistance, scientific data, and recommended procedures and standards in the conduct of their programs. If, by administrative decision, Service participation in the cooperative interstate milk or interstate shellfish certification activities was withdrawn, longstanding programs on which health agencies depend for public protection would be destroyed overnight. The Executive Board of the Conference of State Sanitary Engineers is alarmed over these possibilities.

After careful consideration of the extreme seriousness of this situation, the Executive Board of the Conference of State Sanitary Engineers, in session on February 3, 1959, strongly urges the Surgeon General and the Secretary, Department of Health, Education, and Welfare, to make every effort possible to provide sufficient funds for the milk and food program, DSES, so that for fiscal year 1960 the food service sanitation activities can be strengthened, and milk and shellfish sanitation activities can at least be continued at the present level of operations.

The executive board urges further that definite steps be taken to increase the appropriations available for milk, food, and shellfish activities in fiscal year

1961 in order to enable the Public Health Service to again fulfill its traditional responsibilities for providing assistance to States in this area of environmental sanitation.

FEBRUARY 3, 1959.

AIR POLLUTION

Mr. PICKARD. In the case of air pollution, this complex problem involving all levels of government, Federal, State, and local, presents one of the greatest potential public health hazards of modern time. The Public Health Service has already made great strides in this field and its programs of training, research, and so forth, but its progress has been meager compared with that which remains to be done. Much has been accomplished but many more problems remain unsolved. It will only be with continued expanded programs that the Public Health Service will be able to keep abreast and to satisfy the requests and demands of the States and general public. Complacency cannot be tolerated at the risk of losing the effectiveness of this program. Many important worthwhile recommendations were forthcoming from the Surgeon General's Conference on Air Pollution. Serious consideration should be given to the implementation of the recommendations of this conference which will place increased emphasis on the efforts of the Public Health Service in its air pollution control program.

I should like to submit the statement of position of Executive Board of the Conference of State Sanitary Engineers on air-pollution control programs.

(The statement referred to follows:)

CONFERENCE OF STATE SANITARY ENGINEERS

STATEMENT OF POSITION OF EXECUTIVE BOARD, CONFERENCE OF STATE SANITARY ENGINEERS ON AIR POLLUTION CONTROL PROGRAMS

I. PROPOSED LEGISLATION FOR EXTENSION AND IMPROVEMENT OF PUBLIC LAW 84-159, AIR POLLUTION RESEARCH AND TECHNICAL ASSISTANCE

Air pollution is a problem of current and growing significance and concern in many States and communities throughout the United States. The Public Health Service's air pollution program provides essential support in the development of technical information and control procedures for dealing with this problem. The activities of the Service are providing needed information about the extent of air pollution in the United States, health and other effects of air pollutants and practical means for measuring and controlling air pollution. The Service also is providing essential assistance to the States in the development and operation of air pollution control programs and the training of technical personnel needed in such activities. There is a continuing need for Federal air pollution research and technical assistance activities and support of the control and responsibilities of States and local communities in this field. The Conference of State Sanitary Engineers therefore favors the permanent extension and strengthening of the program authorization included in Public Law 84-159.

For these purposes, the conference endorses the provisions of S. 441 and H.R. 3183, as introduced in the 86th Congress. These bills would permanently extend the authority of the Public Health Service to carry on the air pollution research and technical assistance program. The removal of the time and monetary ceiling limitations on annual appropriations would provide better assurance of the continuing availability of essential assistance to States and local communities in controlling air pollution. The existing act would also be amended to make clear the authority of the Service to provide financial assistance to States and localities in investigations and surveys of their specific air pollution problems. In addition, a new section of the bill would declare the intent of Congress

that Federal establishments and organizations observe good practices and cooperate with State and local authorities in controlling air pollution.

II. NATIONAL GOALS FOR AIR POLLUTION RESEARCH

The Conference of State Sanitary Engineers congratulates the Public Health Service on its sponsorship of the recent National Conference on Air Pollution, which effectively called to the attention of the public and industrial leaders and professional personnel the urgent need for the expansion of research on the extent, effects, and control of air pollution. The conference endorses the further specific development of these research needs into a 10-year national program which would delineate funds required, and outline the respective responsibilities of various levels of government and industry and other private groups in its accomplishment.

III. FINANCIAL ASSISTANCE FOR AIR POLLUTION EVALUATION PROGRAMS

The Conference of State Sanitary Engineers urges the Public Health Service to initiate, at as early a date as feasible, financial grants-in-aid to the States for the establishment and operation of air pollution evaluation programs, as recommended by the Conference of State and Territorial Health Officers with the Surgeon General. The air pollution committee of the conference is authorized and requested to collaborate with the Public Health Service in the development of the specific requirements of States and local communities for such grants.

FEBRUARY 3, 1959.

WATER POLLUTION CONTROL

In the case of water pollution control, it is imperative that the programs of the Public Health Service be increased and expanded so that the Public Health Service and the States can continue one of the most effectively functioning Federal-State programs that has been undertaken in recent times. The Federal water pollution control program authorized by Public Law 660 of the 84th Congress has helped strengthen State pollution control agencies and has achieved a degree of cooperation between Federal, State, and local governmental agencies which has been most effective. We cannot afford to lessen this effectiveness in any way but, instead, we must strive to make it even more effective by increasing the programs of the Public Health Service. There is no great need for me to tell you of the tremendous importance of the water pollution programs of the Public Health Service. These have been well-documented by many persons and organizations.

The Conference of State Sanitary Engineers would like, however, to point out that the problems concerned with and resulting from an unprecedented population and industrial growth have not minimized in importance. They continue to place a heavy burden on the water pollution control program of the States and upon the facilities and personnel of the Public Health Service. Predicted demands on the Nation's water resources show that there must be an effective national effort if water needs are to be met. To achieve this national effort all of the individual States must have effective and adequate water pollution control programs. Many States still need to extend their programs. With the stimulation of the Federal grants, many State appropriations for water pollution control programs have been increased and this progress has been met in program expansion and many improvements have been brought about. Any reduction or termination of Federal water pollution control program grants would seriously affect State programs and in turn the national program. For this reason and because the grant program is achieving its

purpose, the conference would urge that the full authorization for water pollution control program grants under Public Law 660 be appropriated for fiscal year 1960.

SEWAGE TREATMENT CONSTRUCTION

It is a well-established fact that sewage treatment works construction has never kept pace with needs except for one short period during 1933-39 when Federal public works funds were available. Such construction has fallen steadily behind and by 1956 when Public Law 660 was passed a large backlog of approximately \$2 billion of such construction had accumulated.

Federal grants to municipalities under Public Law 660 have again stimulated construction of sewage treatment works. In 1958, this reached an alltime high when sewage treatment works contract awards of \$400 million were made. This represents an increase of 80 percent over the 5-year pregrant period of 1952-56. The increase in contract awards during 1957-58 over the 1952-56 annual average was about equal to the value of contract awards for projects receiving Federal grants.

Any reduction of Federal construction grant funds would seriously retard the national program to control water pollution from municipal wastes at a time when the program is badly in need of increased support. This would indeed be unwise in the face of our ever-increasing demands for greater quantities of higher quality water for municipal, industrial, and other purposes as well as the elimination of public health hazards attendant to the pollution of our public waters. With this in mind, we would therefore urge that this program be continued full support until such time as the backlog of needed municipal sewage treatment plant construction has been eliminated and so long as such needs can be proven to exist.

WATER POLLUTION RESEARCH

Closely allied with the above needs is the continued needs for an increased emphasis on water pollution research. The gap between what is known and what must be known to assure effective water quality management can be closed only by adequate supported research. Current water pollution research support is grossly inadequate to meet either the present water quality management needs or those predicted. Not enough serious thought has been given to the research needs in this field. We would therefore urge that this program of water quality management research be greatly accelerated and that such needs be continued at an accelerated rate so long as they present themselves to be of serious consequence.

All these things can be accomplished with adequate grant and aids programs which will enable the Public Health Service and the States to continue their very effective working partnership.

PREPARED STATEMENT

I should like to submit the statement of the position of the executive board of the conference of State sanitary engineers, with regard to the municipal sewage treatment works construction, the Federal water pollution control research grant, and grants for water pollution control programs.

Senator HILL. All right, sir. We will be glad to have that.
(The statement referred to follows:)

CONFERENCE OF STATE SANITARY ENGINEERS

STATEMENT OF POSITION OF EXECUTIVE BOARD, CONFERENCE OF STATE SANITARY ENGINEERS RELATING TO FEDERAL GRANTS FOR CONSTRUCTION OF MUNICIPAL SEWAGE TREATMENT WORKS

Sewage treatment works construction has never kept up with needs except during 1933-39 when Federal public works funds were available. Since that time such construction has fallen steadily behind and by 1956, when Public Law 660 was passed, a huge backlog amounting to nearly \$2 billion had been allowed to accumulate.

Federal grants to municipalities under Public Law 660 have stimulated increased construction of sewage treatment works. This stimulation in 1958 resulted in an alltime record for sewage treatment works contract awards of \$400 million, an increase of 80 percent over the 5-year pregrant period of 1952-56. The increase in contract awards during both 1957 and 1958 over the 1952-56 annual average was about equal to the value of contract awards for projects receiving Federal grants.

The reduction or discontinuance of Federal construction grant funds would seriously retard the national program to control water pollution from municipal wastes. This slowdown would come at a time when our expanding national economy and defense needs demand ever-increasing quantities of higher quality water for municipal, industrial, and other purposes.

The executive board of the Conference of State Sanitary Engineers, in session on February 3, 1959, expresses its emphatic support for the appropriation for fiscal year 1960 of the full authorization for construction grants under Public Law 660.

Mr. PICKARD. As a representative of the Conference of State Sanitary Engineers, I would like to express to you, the Committee on Appropriations for Health, Education, and Welfare, the thanks of the entire membership of the Conference of State Sanitary Engineers for the time you have allotted to our organization to be heard regarding these very vital matters concerning the preservation of the health and welfare of the people of our Nation.

Thank you very much, Mr. Chairman.

Senator HILL. Thank you very much, Mr. Pickard.

COMMUNICATION

Senator HILL. I have received a letter from Mr. J. Monroe Sullivan, vice president of the Pacific American Steamship Association, Washington, D.C., requesting increased appropriations to the Public Health Service, Sanitary Engineering Division, for the purpose of strengthening the sanitary engineering inspection services of merchant vessels. Mr. Sullivan's letter will be included at this point in the record.

(The letter referred to follows:)

PACIFIC AMERICAN STEAMSHIP ASSOCIATION,
Washington, D.C., May 8, 1959.

Subject: Public Health Service sanitary engineering inspections.

Hon. LISTER HILL,
Senate Appropriations Committee,
F-37 Capitol Building,
Washington, D.C.

DEAR SENATOR HILL: The Pacific American Steamship Association is a trade association representing a large majority of the west coast American flag steamship operators serving noncontiguous, interstate, and foreign commerce. We are writing to you to present our views concerning the necessity for adequate appropriations to carry on sanitary inspection of merchant vessels.

It has come to our attention that, because of budgetary limitations, the Division of Sanitary Engineering of the U.S. Public Health Service is planning to greatly curtail the inspection of merchant vessels. In our view, it is necessary to carry on this vital function to help prevent the transmission or spread of communicable diseases in our interstate and foreign commerce.

The basic law authorizing the Public Health Service to perform this sanitary inspection service and prepare regulations to prevent the transmission or spread of communicable diseases is Public Law 410 of the 78th Congress. Section 361(a) of that law provides:

"The Surgeon General, with the approval of the Administrator, is authorized to make and enforce such regulations as in his judgment are necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other State or possession. For purposes of carrying out and enforcing such regulations, the Surgeon General may provide for such inspections, fumigation, disinfection, sanitation, pest exterminator, destruction of animals or articles found to be so infected or contaminated as to be sources of dangerous infection to human beings, and other measures, as in his judgment may be necessary."

Regulations currently in force are designed to carry out the above legislative mandate and it has long been the view of ship operators that compliance with these standards is not only a statutory obligation placed upon them but is a necessary requirement for the benefit of the general public.

A ship is a community but unlike other communities it is mobile and it would be impossible for any local or State authority to exercise complete jurisdiction over it in terms of health and sanitary requirements. Therefore, for the protection of the general public the Federal Government is the only agency which has sufficient authority to provide this protection.

In checking with the Public Health Service I find that adequate provision was contained in their budget to perform this sanitary inspection service but that it was deleted by the Bureau of the Budget. I further find that the Division of Sanitary Engineers feels that unless sufficient funds are obtained they will cease to perform periodic inspections of all cargo vessels engaged in interstate and foreign commerce and will concentrate on inspection of passenger vessels only. Cargo vessels engaged in foreign trade carry products from all ports in the world and the necessity for maintaining high sanitary standards on them is particularly important. Certainly any substandard situation in the vessel structure or in operating practices on the vessels engaged in foreign trade or on vessels engaged in interstate commerce could be an open invitation to contamination.

As is well known, most cargo ships under the U.S. flag carry up to 12 passengers. These vessels do not carry a medical officer and thus the importance of sanitary inspection is at least as great as it is on passenger ships, if not greater.

Ship operators take great pride in the warranty they are able to give both crew and passengers as regards health standards.

Of some importance in this matter is the fact that the Federal Government has assumed certain important responsibilities toward seamen by providing Public Health Service hospitals in port cities. It would seem completely consistent that the Public Health Service should assure itself that the place of work of these seamen is completely sanitary in order to avoid the likelihood of diseases and hence a heavy call upon the facilities of the hospital themselves. Further in this regard, the foreign quarantine inspectors take all precautions to prevent influx of diseases, a concomitant part of this work is the inspection performed periodically on U.S.-flag ships by sanitary experts.

Unlike some Government regulations and inspections that stem therefrom, ship operators wholeheartedly endorse Public Health Service sanitary inspections and, as a matter of company policy, take immediate steps to correct any difficulties arising from such inspections. As businessmen, steamship management recognize that the public health and welfare require this. They know that their ships can affect more than the immediate crew and the immediate cargo and for this reason they encourage sanitary inspection of their vessels.

Of transcending importance to the issuance of sanitary certificates is the psychological fact that standards required by a Federal agency carry with it prestige which greatly assists companies in disciplining employees ashore and afloat to adhere to sanitary standards abroad merchant ships. Thus the impact of safety standards required by the Government is much greater than those which might be unilaterally imposed by company medical authorities.

Sufficient funds are required to perform needed inspection and to keep abreast of progress being made in the new materials that go into the construction of ships and to keep abreast of new developments in ship construction and equipment.

In 1958¹ the Division of Sanitary Engineering inspected 774 ships out of a total of 2,096 operated by 350 companies. Two hundred and fifty-nine of these three hundred and fifty companies were operating ships at a level of "C" or below, which means that critical sanitation problems existed.

In 1958 only 18 companies had a level of "A" on their fleets and received either a commendation or citation from the Public Health Service. The following statistics show the number of vessels inspected in the last 8 years as compared with the number of vessels in existence.

Year	Vessels operated	Vessels inspected	Year	Vessels operated	Vessels inspected
1951-----	2,458	1,451	1955-----	1,943	985
1952-----	2,577	1,595	1956-----	2,056	1,114
1953-----	2,323	1,417	1957-----	2,225	905
1954-----	2,039	1,100	1958-----	2,096	774

The following table shows the number of inspections on our member-line vessels in 1957 and 1958: ¹

	Vessels operated 1957	Vessels inspected 1957	Vessels inspected 1958
American Mail Line-----	12	1	3
American President Lines-----	36	21	27
Grace Lines, Inc-----	35	22	26
Luckenbach Steamship Co., Inc-----	14	14	14
Matson Navigation Co-----	22	8	16
Moore-McCormack Lines, Inc-----	48	24	35
Oliver J. Olson & Co-----	3	1	2
Pacific Far East Line, Inc-----	29	6	11
States Steamship Co-----	18	6	6
Weyerhaeuser Steamship Co-----	8	6	7

The above figures indicate that periodic ship inspections have been greatly lessened, falling from a level of 61 percent in 1952 to 37 percent in 1958. If this rate of decline continues, it could pose a dangerous situation and would increase chances for contamination within merchant vessels and between merchant vessels. To date no serious contaminations have resulted in American-flag ships—in great degree a result of our crew personnel being properly trained by management together with the cooperation of seafaring unions and the advice and supervision of the Public Health Service itself.

If the proposed reduction in the Division of Sanitary Engineering in the budget becomes effective, sanitary inspection of cargo vessels in foreign trade will be eliminated and Public Health Service will inspect such vessels only upon complaint and referral. Such a situation will not be in the public interest.

It is our understanding that the Foreign Quarantine Service, in addition to its other duties will take over inspection of food preparation and storage, and galley equipment when they board ships for their entry inspections. While this limited inspection is perhaps feasible to be done by the Foreign Quarantine Service, there are other aspects of ship inspections which the Division of Sanitary Engineering has been doing. Before we would be willing to agree to a decrease in Sanitary Engineering inspections we would want assurance that another division of the Government would perform the entire range of sanitary inspection functions. Without assurances of this nature any suggestion that the Foreign Quarantine Service take over only part of the Division of Sanitary Engineering duties is a poor substitute for the present high standards of sanitary inspection.

We in the shipping industry greatly respect the job done by the Division of Sanitary Engineering of the Public Health Service. We know that it is in the public interest that these high standards be maintained and we urgently request

¹ Source : U.S. Public Health Service.

that funds for the Division of Sanitary Engineering be made available by the Appropriations Committees of the Congress.

It is respectfully requested that this letter be made a part of the official record.
Very truly yours,

J. MONROE SULLIVAN,
Vice President.

Senator HILL. Is Dr. S. Ross Taggart here?

Doctor, we are glad to have you here, sir. If I had known you were here, I would have sought to give you an opportunity to testify a little earlier. I know you are a very busy man. You no doubt have an office full of patients waiting on you now. We are sorry you have been delayed, sir.

We will be delighted to have you proceed in your own way.

AMERICAN VENEREAL DISEASE ASSOCIATION

STATEMENT OF DR. S. ROSS TAGGART, PRESIDENT-ELECT

TREND IN VD CASES

Dr. TAGGART. Senator Hill and members of the committee, I am spokesman today for the American Venereal Disease Association. As such, I speak for physicians from every State and Territory of the United States and the District of Columbia.

The association, whose primary purpose is the control of venereal diseases, is alarmed with trends indicated in the most recent data reported by State health departments to the Public Health Service. Of greatest concern is the fact that comparative data on primary and secondary syphilis for the 6-month period, July 1, to December 31, 1958, showed an increase of 15 percent over the same period in 1957. Thirty States, in all geographic areas, reported increases in infectious syphilis during this period. Increases were reported in both the white and nonwhite populations, among both private patients and clinic cases. This data is more recent and even more foreboding than that presented you in the joint statement and demonstrates the urgent need for a substantial increase of Federal support, if our goal of eventual practical eradication of syphilis is ever to be reached.

I would like to add that, during the same period of time, the number of cases of gonorrhea reported in the country increased 11 percent, and were even more widespread, geographically, with increases being reported in 42 States.

INFECTION IN YOUNGER GROUPS

The youth of our country are very much involved in recent venereal increases in venereal disease incidence. For example: In the 15- to 19-year age group, reported infectious venereal disease rose from 45,032 in calendar year 1957 to 49,520 cases in 1958, an increase of 10 percent. The above data refer to fresh cases of venereal disease, recently reported, and suggest an increasing attack rate. Immediate intensive control methods must be applied to prevent further increases in incidence.

UNDISCOVERED CASES

And we cannot present today's problem without referring to the current reservoir of syphilis cases, undiscovered in the early stages

of the disease, who must be found and adequately treated to prevent disability and premature death. There are more than a million syphilitics in our population who require such treatment. If they are not found and adequately treated, it is conservatively estimated that 143,000 cases of late disabling syphilis will occur, including 44,000 cases of syphilitic psychoses that will require a total of 4,401,000 patient-years in mental institutions at a cost of more than \$572 million. We know, as a result of our serologic surveys here in Washington, many thousands of cases have not as yet been found. For example: In 93,000 persons tested here in the last 4 years, over 2,000 required treatment. Only adequate case-finding activity will prevent these tremendous economic losses in the future.

SYPHILIS AND PSYCHOSES

The effects of undiscovered syphilis from the past is very evident today. For example: There are some 32,000 resident patients in mental hospitals in the United States because of psychoses due to syphilis, at a maintenance cost of \$48 million per year. In fact, about 500 of these patients are right here in the District of Columbia, and are costing taxpayers more than a million dollars annually. I have prepared a table of our past 8 years' experience with District residents hospitalized for these types of psychoses at St. Elizabeths Hospital, which strongly supports the need for continued case finding.

Senator HILL. Excuse me, Doctor. We will have that table appear in the record following your remarks. Is that all right?

Dr. TAGGART. Yes, sir.

Not only in early infectious syphilis, but also in the remaining large reservoir of untreated syphilitics, it would be foolhardy, economically, not to do so, for, in our experience, we know that, in the 18 patients admitted last year, three-fifths of the group will never be discharged. They will be a continuing burden on the hospital until they eventually die. The cumulative cost to the taxpayers, for this group alone, will be \$400,000, as the hospital stay, averaged for the group, will be 10 years.

NEED FOR EXTENSIVE CONTROL MEASURES

For the above reasons, and the fear that I have of a new reservoir of latent syphilis forecast by recent increases in early syphilis, unless immediate and extensive control measures are applied, I urge you to give serious consideration to the stated need of the State and city health departments, and the recommendations of the joint statement by the Association of State and Territorial Health Officers, the American Venereal Disease Association, and the American Social Hygiene Society for adequate personnel, clinical facilities, travel, and epidemiological services to meet this problem.

The table is attached.

(The statement referred to follows:)

STATEMENT OF S. ROSS TAGGART, M.D., PRESIDENT-ELECT FOR THE AMERICAN VENEREAL DISEASE ASSOCIATION

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And we cannot present today's problem without referring to the current reservoir of syphilis cases, undiscovered in the early stages of the disease, who must be found and adequately treated to prevent disability and premature death. There are more than a million syphilitics in our population who require such treatment. If they are not found and adequately treated, it is conservatively estimated that 143,000 cases of late disabling syphilis will occur, including 44,000 cases of syphilitic psychoses that will require a total of 440,000 patient-years in mental institutions at a cost of more than \$572 million. We know, as a result of our serologic surveys here in Washington, many thousands of cases have not as yet been found. For example: In 93,000 persons tested here in the last 4 years, over 2,000 required treatment. Only adequate case-finding activity will prevent these tremendous economic losses in the future.

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For the above reasons, and the fear that I have of a new reservoir of latent syphilis forecast by recent increases in early syphilis, unless immediate and extensive control measures are applied, I urge you to give serious consideration to the stated need of the States and city health departments, and the recommendations of the joint statement by the Association of State and Territorial Health Officers, the American Venereal Disease Association, and the American Social Hygiene Society for adequate personnel, clinical facilities, travel, and epidemiological services to meet this problem.

Admissions to St. Elizabeths Hospital for psychoses due to syphilis, 1950-57

	Admissions with psy- choses due to syphilis	Total of residents with psy- choses due to syphilis	Total yearly cost of hos- pitalization for residents with psy- choses due to syphilis
1950.....	59	676	\$1,050,000
1951.....	58	624	1,060,000
1952.....	50	602	1,030,000
1953.....	45	572	1,040,000
1954.....	35	548	1,050,000
1955.....	31	524	990,000
1956.....	27	500	1,000,000
1957.....	18	491	1,090,000

PREPARED STATEMENT

Dr. TAGGART. I should also like to submit for your consideration a statement by Richard D. Hahn, who is secretary of the executive committee of the American Venereal Disease Association.

Senator HILL. We will be glad to have that statement appear in the record following your statement, Doctor. You brought us a splendid statement, and we thank you for it.

Dr. TAGGART. I appreciate the opportunity to appear.

(The statement referred to follows:)

STATEMENT BY RICHARD D. HAHN, M.D., REPRESENTING EXECUTIVE COMMITTEE
OF THE AMERICAN VENEREAL DISEASE ASSOCIATION

I am sure that you gentlemen have had enough statistics presented to you in the brochure "Today's VD Control Problem" and by Dr. Taggart and I shall spare you as much as possible. I have been asked to appear before you today as a physician in private practice and as a member of the faculty of one of our large medical schools and schools of hygiene and public health. I shall give you my opinion based upon 20 years' experience in the field of venereal disease, and shall present figures from the State of Maryland and the city of Baltimore.

I shall not belabor the obvious point that syphilis and the other venereal diseases are not disappearing. It can only be said with certainty that they have not yet disappeared. Indeed nationwide decline in interest in venereal diseases has resulted in such a great dearth of skilled clinical experts in the field that, even if we maintain our activities at their present level, in the event of a national emergency, it is highly doubtful that skilled personnel would be available while training programs are gotten underway. Certainly only by adequate aid to the States can a small nucleus of trained personnel be made available which can later be expanded in case of necessity.

There is really only one other important point which I wish to make. I shall try to support this by some local figures. This is that the venereal diseases unlike almost all other diseases are, by and large, found only when they are looked for. Unless personnel is made available to ferret out these cases they usually do not come to light. Conversely, increased public health control measures in a given area usually result in an initial rise in case rates due to the uncovering of hitherto undiscovered cases. In other words, in this particular field our country runs the grave danger of lulling itself to sleep by inactivity. The less the activity the less the reported venereal disease rates will be. Venereal disease is like an iceberg with only a minute portion appearing above the surface of the water.

It is quite true that reported cases of infectious syphilis declined significantly from 1947 through 1954, but since 1954 early syphilis has not continued to decline and indeed both infectious syphilis and gonorrhea have risen in 1958 as compared with 1957. This is even assuming that the reported cases represent a true picture which I think I can show you they do not.

During fiscal year 1958 private physicians reported only 221 (8 percent) of a total of 2,732 cases of syphilis in the State of Maryland. This figure indicates

that most cases of syphilis seen by private physicians are not reported and it would be quite fair practically to quote a figure double this rate to get a truer picture of the situation. Of 277 cases of infectious early syphilis reported in the State of Maryland during fiscal year 1958 only 40 were reported by private doctors. Maryland has a total syphilis rate for the fiscal year 1958 of 96.6 per 100,000 and a rate of 9.8 per 100,000 for infectious early cases.

In 1957, the infectious VD rate for the 15-to-19-year-old group in Maryland was 642.2 per 100,000, about twice the national age specific rate of 397.3. The most recent (1955) cost of maintaining the syphilitic insane in Maryland State mental institutes was \$320,000 annually. A special project during 1958 was the testing of migrant farm and cannery labor in the rural areas of 13 Maryland counties of 3,145 migrant laborers tested 419 showed a positive serologic test, a rate of 1,200 per 100,000.

For the fiscal year 1958 Baltimore city has the highest reported rate for infectious early syphilis of any large city (200,000 population or more) in these United States with a reported rate of 24.5 cases of infectious early syphilis per 100,000 population, even exceeding that of Houston, Tex., which has a reported rate of 23.99, and as compared with an overall large city rate of 8.44 and a continental U.S. rate of 3.92 per 100,000. It is interesting that this reported rate coincides with the assignment of several crackerjack investigators to the State and city health department by the U.S. Public Health Service. I do not mean to imply, gentlemen, that these earnest and able young men spread syphilis but only that they detect it.

At the Johns Hopkins Hospital we still consider it very much worth while to do routine serologic testing on both private and public patients both in the hospital and in the outpatient department. During the 4-year period 1955 to 1958, inclusive, 6.93 percent (10,107) of 145,931 serologic tests done at our hospital were positive for syphilis. Breakdown by year shows a slight decrease for 1958 as compared with previous years.

Year	Total	Positive	Percent positive
1955.....	35,811	2,650.5	7.4
1956.....	35,102	2,600.5	7.4
1957.....	35,521	2,534.5	7.1
1958.....	33,780	2,051.0	6.0
January, February, 1959.....	5,717	276.0	4.8

Much progress has indeed been made in venereal disease control. Continued success requires continued vigilance with adequate case finding, diagnostic, and treatment personnel and facilities for diseases which, if undetected, can result in serious heart disease, blindness, paralysis, mental disorders, and death.

COMMUNICATION

Senator HILL. Dr. William L. Fleming and Mr. T. Lefoy Richman, of the American Social Hygiene Association, have requested that their statements be included in the record. These statements support a request for additional funds for the control of venereal diseases and will appear at this point in the record.

(The statements referred to follow:)

I would like to strongly support the recommendations for sufficient Federal appropriations to permit an adequate venereal disease control program contained in the joint statement on today's V.D. control problem by the Association of State and Territorial Health Officers, the American Venereal Disease Association, and the American Social Hygiene Association. The statement recommends a minimal budget of \$5.8 million (which is greater than the recommendation in the Presidential budget) and a preferable budget of \$6.9 million, even though the larger budget is not considered to provide sufficient funds for assuring adequate epidemiologic service to private physicians for venereal disease cases on a routine basis.

I will confine my remarks to the discussion of syphilis control for the sake of simplicity, although new measures are badly needed for the control of gonor-

rhea also. The attack rate of syphilis as measured by the number of reported primary and secondary syphilis cases has declined spectacularly since World War II but has changed little in the past 4 years. Indeed, as the joint statement indicates, the attack rate may even have increased slightly in the United States as a whole and certainly a substantial number of States and cities report such an increase. This situation is much to be feared in the case of a communicable disease which through necessity has been controlled by treatment rather than by prevention as in other controlled communicable diseases. New control measures seem to be needed not only to achieve further reduction in the attack rate but possibly even to stand still.

Pilot projects in achievement of better liaison between official health agencies and private physicians to facilitate better reporting of V. D. cases and much better epidemiologic investigation of these cases have been carried out and would seem to point the way to the potentiality of such a method. The joint statement cites the example of Georgia where the State health department aided by Federal grants has put on a program which in the last few years has more than trebled the number of reported infectious cases of syphilis by private physicians—and with epidemiologic investigation of these cases for sex contacts by health department personnel in almost all instances.

In spite of the promise of this program, it seems unlikely that States will be able to adopt it quickly both because of limitations of funds and because it has not yet been completely proven. However, it would seem that the time is ripe to attempt a large scale project in promotion of reporting and contact investigation of venereal disease patients of private physicians by a partnership of private physician and health department, which could also be very important in other ways. The American Social Hygiene Association staff has estimated that a 10-State demonstration project in health department-private physician point program might well be in order. Examination of the Georgia program and questions directed to the venereal disease branch of the Communicable Disease Center suggest the need of 75 to 100 "contact men" to explain the program to private physicians, 10 to 15 additional V. D. interviewers, 20 to 25 additional V. D. field investigators. It is estimated that salaries of these individuals with appropriate funds for travel and training would put the cost of such a 10-State demonstration project at approximately \$1 million.

States for such a 10-State demonstration project would be picked on the basis of those having a significant problem, being aware of it, having a stable program of V. D. control, and having leadership that favors the special private physician program.

In summary, even though general needs cannot be met beyond the \$5.8 million, it is hoped that approximately another million dollars can be added to permit the 10-State demonstration project.

STATEMENT OF T. LEFOY RICHMAN, ASSOCIATE EXECUTIVE DIRECTOR, AMERICAN SOCIAL HYGIENE ASSOCIATION ON VENEREAL DISEASE

In February of this year the ASHA jointly with the American Venereal Disease Association and the Association of State and Territorial Health Officers released a statement which showed syphilis and gonorrhea to be major health hazards in the United States. It showed that in fiscal 1958 reported early infectious syphilis had increased by 6.4 percent over fiscal year 1957; that 22 States and 31 cities over 100,000 population show increases among the 15-19 age group; that 12 States and 13 cities show increases among the 10-14 age group; that among reportable diseases in the United States, syphilis ranks fourth, gonorrhea third.

Since release of this joint statement, the ASHA has obtained new information which indicates that increases in primary and secondary syphilis and gonorrhea may be greater and more general than the data from our February release had suggested.

The new information compares the last 6 months of calendar 1958 with the same period for 1957. It is presented by source of report (private physician, clinic or hospital) with subbreaks for sex and race.

It shows that early infectious syphilis (primary and secondary) reported from all sources was 15.2 percent higher in the 1958 half-year than the 1957 half-year and that gonorrhea was 11.1 percent higher.

The overall increase in early infectious syphilis was almost identical for white and nonwhite (15.1 and 15.2 percent, respectively). The largest increase was 26.1 percent in white clinic cases.

Increases were general throughout the country.

Highest total increase in gonorrhea was 19.5 percent among white females. Among white males the increase in gonorrhea was 12.9 percent; among nonwhite males it was 8.7.

I should like to make the tabulation of these data a part of the record.

These data indicate that a serious health hazard is becoming daily more acute. They certainly do not suggest decrease of the funds provided by the Federal Government for assistance to States and cities in their venereal disease control effort.

After the President's budget for fiscal 1960, with its proposed cut in venereal disease appropriations, this association polled the States to determine whether losses they would sustain in the reduced budget could be made up locally. The answers, as this tabulation will show, were overwhelmingly negative.

Only 3 of 47 States replying to date said they could make up the losses without impairment to program; 8 receive no Federal funds presently, and 1 State, just to be safe, answered both yes and no.

The developing pattern in the United States is for local programs to supply facilities, administration and limited funds, whereas the State and Federal programs provide funds and technical assistance.

Forty-one States, 2 Territories and 59 cities report they could not carry out their venereal disease casefinding efforts without Federal assistance.

In November, States were asked if they would have sufficient funds for effective venereal disease control in fiscal 1960 if Federal and State participation remain unchanged. Twenty-two States, two Territories and seven cities replied "no" and indicated they would need an additional \$407,800 from the Federal Government.

Twenty-four States, 1 Territory and 77 cities said they would not need additional Federal funds if State-Federal participation remain the same.

Thus an increase in the Federal grant allocation from \$2.4 to over \$2.8 million in a total Federal appropriation of \$5.8 million is needed merely to bring venereal disease programs in 22 States, 2 territories and 7 cities up to an effective level and to maintain at status venereal disease control programs in the rest of the country.

We, therefore, recommend as minimal for fiscal 1960 an appropriation to the Federal venereal disease program of \$5.8 million, \$2.8 million of which would be grants to States.

And we further urge that serious consideration be given to an additional \$1 million for a special demonstration which Dr. Fleming will describe for you in detail.

STATEMENT

Senator HILL. Miss Monica B. Owen, of the National Council of Churches of Christ, has requested that her statement concerning the plight of migrant workers be included in the record. Miss Owen's statement will be inserted at this point.

(The statement referred to follows:)

The lack of adequate Public Health services for migratory agricultural workers presents continuing and serious problems not only to the people themselves but to the communities near which they work. As thousands of families move from one harvest area to another they cross State lines so that the problem is a national one.

A study of the health needs of this group made by the Migrant Ministry showed that the migrants themselves mentioned most often the difficulties they face in living in boxcars, renovated chicken houses and one-room shacks. Unsanitary toilets, dirty mattresses, lack of any sort of bedding, no bathing facilities, no place for isolation of the sick—all these were repeatedly spoken of as one of the worst of the hardships of migratory life.

Many more nurses and sanitarians are needed, especially in the rural areas to which migrant families come. They can help communities, growers, and migrants understand the importance of maintaining decent health standards in camps and "quarters."

Residence laws exclude migrants from the health services available to the general population. For example, a feeble-minded girl, chained to a tree in camp each day while her mother worked in the fields was not accepted in any institution because she was a nonresident. A seriously handicapped spastic child was found lying alone and helpless in a migrant cabin. She, too, was a nonresident. Examples of this kind could be multiplied many times.

A greatly increased Public Health staff is needed to interpret special problems of this type to States and to communities and to encourage them to include the migrant group in their services.

The migrants tell us of their difficulties in getting help when they are sick. They do not know how or where to find it. They often have no transportation to get to doctors, clinics or hospitals. They cannot leave their work in the fields during the daytime. They are afraid to ask for service for fear of rejection. Sometimes they cannot tell in English what is wrong with them.

Mobile clinics, often with Spanish-speaking staff, are needed to serve in hundreds of small camps, while permanent clinics are needed in camps that house hundreds of people. For example, the Public Health clinic at the camp at Fort Lupton, Colo., has made a tremendous difference in the lives of the migrant families who return year after year.

Funds for health education are greatly needed for this group. Through the use of simple, practical reading materials, films and film strips much could be done to help them to understand general health practices; to learn how to feed their families adequately with little money, limited facilities and no refrigeration; to care for babies and young children, and for the sick when the whole family lives in one room.

At the present time the Public Health Service works with States, defining the special health needs and problems of migrants, finding effective ways of meeting these needs and helping communities toward the development of programs to protect not only the migrants but the general public. The work has been outstanding but lack of funds has limited it so that only a fraction of the need has been met.

The prediction of the Labor Department is that migrants will be needed for many years to come and appropriations for the Public Health Service will not only meet immediate needs but will help to lessen the problems in the time ahead.

It is earnestly requested that the suggested appropriation of \$100,000 be greatly increased in order to serve migrants, communities, and States more adequately.

LETTER FROM SENATOR MURRAY

Senator HILL. Senator Murray has addressed a letter to me, to which he attaches a letter from the Acting Surgeon General John D. Porterfield, regarding the construction of animal quarters at the Rocky Mountain, Mont., Laboratory. Senator Murray's letter, along with Dr. Porterfield's, will be included at this point in the record.

(The letters referred to follow:)

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
May 26, 1959.

HON. LISTER HILL,
Chairman, Health, Education, and Welfare Appropriations Subcommittee, U.S. Senate, Washington, D. C.

DEAR LISTER: On May 6 I asked the Surgeon General to furnish me with information relative to the need for the animal house at the Rocky Mountain Laboratory at Hamilton, Mont.

The special report on the Rocky Mountain Laboratory, to which he makes reference, has already been made a part of your subcommittee's hearing record. I would appreciate it if the enclosed May 19 letter from Acting Surgeon General John D. Porterfield is made a part of the record.

I want you to know how deeply Senator Mansfield, Congressman Metcalf, Congressman Anderson and I appreciate the personal interest you have taken in the appropriation for the needed animal house.

With warm personal regards, I am

Sincerely yours,

JAMES E. MURRAY, *U.S. Senator.*

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
Washington, D.C., May 19, 1959.

HON. JAMES E. MURRAY,
U.S. Senate, Washington, D.C.

DEAR SENATOR MURRAY: Before replying in detail to your inquiry of May 6, 1959, concerning the Rocky Mountain Laboratory, may I thank you for your interest and for the privilege of discussing the research activities of this relatively small but competent and productive laboratory. The enclosed special report on the Rocky Mountain Laboratory will answer, I believe, the several general questions you ask regarding the research objectives of the Rocky Mountain Laboratory and its history of accomplishments. As you have requested, additional copies for distribution to the members of the Senate and House Appropriations Committees are provided. These are being sent under separate cover.

The report does not, of course, cover all of the advances in medical research to which the scientists of the Rocky Mountain Laboratory have contributed. It does, however, give an indication of the importance of its location in the study of diseases of special importance to the Western States. The need for more adequate animal production facilities is also explained in the report.

You mentioned a remark made during the House Appropriations Committee hearings "that the laboratory is a facility which duplicates installations in other parts of the country" referring, presumably, to other Public Health Service installations. I believe that the description of the activities of the Rocky Mountain Laboratory contained in the special report indicates that the mission of this laboratory is unique and one which certainly does not lend itself to duplication. However, in the field of medical research, it is often impossible and perhaps even undesirable to circumscribe too strictly the direction and extent of any individual scientist's imagination and originality. While virtually all the activities of this laboratory are related directly to its traditional mission—research on diseases in the Northwest—we could hardly regard incidental useful research developments dealing with other diseases or with basic medical issues as being less valuable to the public than if they had originated in Bethesda or elsewhere. As far as the primary purpose and objectives of the Rocky Mountain Laboratory are concerned, these are not in conflict with any other component of the Public Health Service.

The staff members of the Rocky Mountain Laboratory are employed under the same rules and regulations of the Federal Government as are all other employees of the Public Health Service. The qualification and pay standards are exactly the same as those which apply to employees of the Federal Government in Washington. The laboratory enjoys excellent relations with the civil service regional office in Seattle, Wash., which assists in the certification of qualified personnel for employment by the laboratory. I am informed that there exists no unusual problem of recruitment or retention of staff because of the geographical location of the laboratory. On the contrary, many of its personnel prefer the advantages of living and working in a small community.

A comparison of the cost of conducting research at the Rocky Mountain Laboratory versus Bethesda indicates that there is very little difference. Comparison is difficult, however, since the Rocky Mountain Laboratory is financed as a self-contained operating unit whereas, in Bethesda, many of the service and supportive costs as well as general overhead expenses are borne by a large number of the various research operations and are consolidated as a central NIH function.

In his testimony before the Senate Appropriations Committee, Secretary Flemming did not ask that the Senate restore this item which was not included in the House bill; his decision was based on the overall fiscal situation, the governmentwide policy of deferring new construction, and reconsideration of priorities.

Sincerely yours,

JOHN D. PORTERFIELD,
Acting Surgeon General.

STATEMENT

Senator HILL. Mrs. Helen L. Peterson, executive director, National Congress of Americans Indians, has requested that her statement in support of increased funds for Indian health activities and Indian

health construction be included in the record. Mrs. Peterson's statement will appear at this point.

(The statement referred to follows:)

Mr. Chairman, my name is Helen L. Peterson. I am an enrolled member of the Oglala Sioux Tribe, Pine Ridge Reservation, S. Dak., and executive director of the National Congress of American Indians, with headquarters at 530 Dupont Circle Building, Washington, D.C. This organization is the only national American Indian organization, with voting membership limited to legally recognized Indians and with membership officially by tribal groups, as well as by individuals. Of about 100 tribal organizations with significant land holdings and/or populations, most are member-tribes of the National Congress of American Indians, with the remainder of them cooperating in activities and sharing in decisions in one way or another.

In resolution 5, passed at our annual convention at Missoula, Mont., September 15-19, 1958, our organization implores the Congress of the United States to appropriate \$50 million for the Indian health program for fiscal year 1960, and I respectfully ask this subcommittee to mark up the bill to that figure. Also, I respectfully ask that the full text of our resolution 5 be made a part of the record of this hearing.

Over 3½ years have passed since the U.S. Public Health Service assumed responsibility for the health of some 347,500 Indians in 24 States, and 37,500 Indians, Aleuts, and Eskimos in Alaska. As your committee knows, the Division of Indian Health was organized within the Public Health Service to administer the program.

While our organization continues to receive some complaints—some justified and some not—we have been much encouraged by many improvements in Indian health services. For example, recent reports released from the Division of Indian Health reveal that since 1954 the TB death rate among Indians, excluding Alaska natives, dropped 40 percent in the 4 years ending with 1957. Among the Alaska natives the decline has been even more dramatic, the death rate having dropped 63 percent in this period. Not many years ago TB was the leading cause of death among Indians; it now ranks in eighth place. However, despite this encouraging progress, the Indian death rate from TB is still about four times higher than the rate for the general population.

During the same period—1954-57—the infant death rate decreased 12 percent from 64.6 to 57.0 per 1,000 live births. It is still a fact that 23 percent of all Indian deaths in the United States occur among infants, compared with only 7 percent for the general population.

From 1954 to 1957, the death rate from gastroenteric diseases has been cut 26 percent—from 50.4 to 37.3 deaths per 100,000 population. This death rate among Indians is nine times greater than that for the total population of the United States.

Between July 1955 and July 1957, there have been more comprehensive health services for the American Indians, and we are pleased to notice that Indian employees are being used to advantage in key positions. Indian sanitarian aids and Indian community workers in health serve an important role in helping Indian people to recognize their own health problems and to work cooperatively with the Public Health Service in bringing about improvements where cooperation is essential.

As the national, all-Indian organization, we are pleased to notice that major improvements and additions in Indian health facilities are beginning to appear. In the near future construction will begin on four new hospitals—Sells, Ariz.; Shiprock and Gallup, N. Mex.; and Kotzebue, Alaska. Five will be completely remodeled to provide better and safer service and major alterations are being made in a number of others. The field health or preventive phase of the program is being materially strengthened with new health centers and clinics being provided at 15 locations.

While there has been some progress toward the development of staff housing, we are told by Public Health Service officials that the continued shortage of suitable housing still poses a major obstacle in recruiting and retaining health personnel in many areas. The isolation of the majority of Indian reservations demands that special housing programs be developed for the retention of vitally needed staff.

An important measure of the Indians' increasing acceptance and use of health services is their utilization of facilities in the last 3 years. The following in-

creases are for the period July 1955 to July 1957: Admissions to all hospitals (including contract hospitals) have increased 41 percent; the average general patient load is 39 percent higher; births in PHS operated hospitals have increased by 18 percent.

Curative and preventive outpatient visits are 62 percent higher; and field health centers, school health centers and dental clinics all reflect increased usage during the same period of time.

We ask the Congress to be reminded, however, that the health needs of American Indians and Alaska natives still overshadow the improvements that have been made to date. Expanded and intensified services by the Division of Indian Health are still critically needed. The fact that the average age at time of death for Indians is 39, compared with 61 for the population as a whole points out the disparity between the health status of Indians and their non-Indian neighbors. To bring these figures into closer balance will require greatly increased appropriations. It will be an expensive job, for most Indians are geographically isolated and are on the lowest rung of the economic ladder.

However, we submit that to delay increasing the appropriations substantially only perpetuates the Indians inability to work and resultant poverty. Thus the delay is, in reality, false economy. While the Indian health problem may be considered geographically centered, the solution of this problem which embarrasses the Nation is necessarily of national concern, not only to the Congress of the United States, but also to the American public.

We understand that the Division of Indian Health originally estimated its budget needs at \$48 million for the fiscal year 1960. The Bureau of the Budget subsequently reduced this figure to \$43½ million. The National Congress of American Indians, by official action, is asking \$50 million for Indian health program services for the 1960 fiscal year and we do so on the following basis:

1. In the comprehensive survey report submitted to the Congress in 1957, at the request of the Congress, the Public Health Service recommended appropriations of from \$60 million to \$65 million within a period of 5 to 10 years in order to do an adequate job in Indian health programing. The appropriation for fiscal 1957 was \$38,775,000. On the assumption that the more quickly adequate health programs are available and the more quickly Indian health can be brought up to the standards of the general population, the more quickly real economy will be effected. We prorated the lowest figure of \$60 million over the least number of years—5—and arrived at the figure of \$51,510,000 for Indian health program for fiscal 1960. We rounded this off at \$50 million as the amount of our request to your distinguished committee and we do earnestly plead for that figure in your markup of the appropriations bill. On this basis alone, we feel our \$50 million request is sound.

2. But there is another reason: The Division's \$48 million preliminary estimate did not include approximately \$2 million in mandatory salary increases the Division will be forced to pay in fiscal 1960. Again necessary staffing will have to be cut back or delayed because of this factor unless you mark up the appropriation.

In view of what is still a deplorable state of Indian health, in view of the fact that needless illness and death is still found in undue proportion among American Indian people and in view of real progress by the Division of Indian Health and its ability to do an effective job, we strongly urge this subcommittee to mark up Indian health program to \$50 million, and also to review construction fund figures with Public Health Service officials in order to arrive at a reasonable and adequate amount for the forthcoming fiscal year. The 1960 construction request was reduced from \$10 million to \$3,087,000.

We appreciate very much the courtesy of your staff to us, both last year and this. And we thank you for receiving our statement.

Respectfully submitted.

HELEN L. PETERSON.

LETTER FROM SENATOR HART

Senator HILL. Senator Hart has addressed a letter to me regarding a number of the items for the Department of Health, Education, and Welfare in this bill, and supporting requests for additional funds. Senator Hart's letter will be included at this point in the record.

(The letter referred to follows:)

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
May 18, 1959.

HON. LISTER HILL,

Chairman, Subcommittee on Departments of Labor and HEW and Related Agencies, Senate Appropriations Committee, U.S. Senate Washington, D.C.

DEAR SENATOR: There are several items in H.R. 6769, making appropriations for the Department of Health, Education, and Welfare for 1960, which are of particular interest to the citizens and the State of Michigan. These are:

Grants for library services.—It is my hope that at least the full \$6 million appropriated by the House, plus the \$1 million previously appropriated, will be made available for this meritorious program.

Payments to school districts and assistance for school construction.—Let me urge you to recommend under these items 100 percent of entitlements under the authorizing legislation. A great many communities in my State have asked my strongest support for this legislation upon which they depend to meet expanded school needs.

Grants for waste treatment works construction.—The applications for funds under this program in Michigan far exceed the amount currently made available to our State. Therefore, we ask that the cut proposed by the administration be rejected and that you appropriate the full \$45 million.

Grants for hospital construction.—While the House has made a considerable improvement on the President's budget recommendations, anything short of the full appropriation remains inadequate from Michigan's point of view. The House action is particularly inadequate with respect to the appropriation to assist nursing homes. The House did not increase the President's recommendation for this category, nor did they, as they did last year, provide the larger appropriation for the nursing home and rehabilitation categories and the smaller appropriation for chronic disease hospitals and diagnostic and treatment centers. If it is impossible to obtain the full \$10 million authorized under the law for nursing homes, the least that should be done is to provide \$6.5 million for nursing homes and only \$4 million for diagnostic and treatment centers.

It will be greatly appreciated if you and your subcommittee will give consideration to the views outlined above. May I also request that you incorporate them in your hearings on H.R. 6769.

Thank you very much.

Sincerely,

PHILIP A. HART.

STATEMENT OF SENATOR FULBRIGHT

Senator HILL. Senator Fulbright has requested that his statement concerning various items for the Department of Health, Education, and Welfare be included in the record. Senator Fulbright's statement will appear at this point.

(The statement referred to follows:)

Mr. Chairman, I want to thank the subcommittee for allowing me this opportunity to present my views on several programs included in the appropriation bill for the Department of Health, Education, and Welfare.

I would first like to discuss the Hill-Burton hospital construction program and the effect which the proposed cut in this program would have on my State. This program is one of the most heartening and humane projects in which our Government engages. The millions of patients who have received medical care in facilities constructed under the program can all testify to its magnificent contribution to our Nation's health and well-being. I wish to summarize briefly the operation of this program in Arkansas. There have been 49 projects completed in my State, and 16 are now under construction. Over 3,500 hospital beds have been added to the State's hospital inventory through the program. Of the total cost for this construction, approximately \$28 million has come from Federal grants out of total project costs of almost \$53 million. And the needs for adequate medical care within the State have still not been met. Eighteen preliminary requests for Federal assistance for general hospital or public health center projects are now pending, which will require Federal grants of approxi-

mately \$6¾ million. Under the President's budget request for fiscal 1960, Arkansas would receive only about \$1,600,000 with which to satisfy these applications for assistance. This compares with an allocation for the current fiscal year of about \$3 million for part C grants. I ask that a letter which I have received from Dr. J. T. Herron, State health officer, be inserted in the record following my statement. Dr. Herron's letter furnishes ample proof of the need for a substantial increase in the appropriation for the program. I know that the committee will give this program careful consideration.

I am also very concerned about the President's failure to request the full authorization for the library services program. Arkansas has received a total of \$277,000 since the program has been in operation, compared to the amount of \$492,000 which it would have received if the full authorized amount had been appropriated each year. The limited funds which have been furnished to the State have been well spent, and the State is making rapid progress in expanding and improving library services in rural areas. I ask that a letter which I have received from Mrs. Karl Neal, executive secretary and librarian of the Arkansas Library Commission, explaining the operation of the program in Arkansas, and the unmet needs, be printed in the record of the committee hearings. The need to eliminate ignorance and misunderstanding is one of the greatest problems facing our country today, and the library services program could be a most effective weapon in winning this battle. I urge that the committee approve the full authorization of \$7,500,000 for the program during the next fiscal year.

I know the committee is fully aware of the administration's efforts to eliminate the waste treatment works construction program. This has been an extremely popular and effective program in Arkansas. Over \$10 million in construction is either underway or has been completed within the State, and 43 municipalities have made application for grant funds. The Arkansas Water Pollution Control Commission has strongly endorsed the President's Advisory Board with respect to the need for continuing the program at its present level. The recommended cut of approximately 60 percent would eliminate from consideration many communities which have relied on receiving a Federal grant to improve their sewage facilities. The Congress established this program to last at least 10 years and it is no doubt true that it will take at least this long to carry out an effective, nationwide pollution control program. I hope that the committee will approve at least the \$45 million voted by the Congress last year.

ARKANSAS STATE BOARD OF HEALTH,
Little Rock, March 24, 1959.

Hon. J. W. FULBRIGHT,
U.S. Senate, Washington, D.C.

DEAR SENATOR FULBRIGHT: I am pleased to have your letter of March 19, 1959, in which you state that you plan to request the Senate Appropriations Committee to make a substantial increase in the funds for the hospital construction program (Hill-Burton program).

This has been, as you know, a very popular program and, at least in Arkansas, we have never had sufficient funds to satisfy all applicants. Since the beginning of the program in 1947, approximately \$52,900,000 has been spent, of which \$27,795,218.59 has come from Federal grants. All in all, 3,617 hospital beds have been added. This does not mean that we have that many additional beds for many small, obsolete, privately owned hospitals have closed. In many areas of the State the people have had, for the first time, adequate hospital care.

It is true that in accordance with the President's budget request, Arkansas will receive approximately \$1,400,000 less than we received this fiscal year for the part C or general hospital construction (we received an allotment of \$2,983,916 under part C for the current fiscal year). We have on file requests for assistance under the program totaling almost \$7 million for general or community hospital and public health center construction. In the post-World War II period there has been a remarkable increase in hospital utilization. Many factors contribute to this, such as lessened apprehension on the part of individuals toward hospitalization, an increase in voluntary hospital insurance programs, and a change in the manner in which medicine is practiced. Enclosed is a table showing the requests for assistance currently on file. This does not take into consideration the unmet need variously estimated at from \$12 to \$20 million for mental hospital construction.

With reference to the part G of the program it is rather difficult to give an accurate picture because of the frequent changes in requests on the part of the local sponsors. However, there is a great unmet need in these categories too.

We feel that the Congress should appropriate the full amount authorized under the law and, also, that we should be able to anticipate receiving this amount for the next several years in order that we might schedule construction in such a manner that the various communities would know fairly well when they would be eligible to receive funds and could plan accordingly to secure local matching funds, select site, employ architects, etc.

At the operational level it is sometimes difficult for us to reconcile our thinking to enormous expenditures for basic and medical research when we are barely able to carry out our responsibilities in the service programs to the public. I, of course, would not want to be placed in the awkward position of being opposed to research as I am aware that research is essential to progress.

We sincerely hope that you will be successful in securing an increase in the funds for the program.

With best personal regards, I am

Sincerely,

J. T. HERRON, M.D.,
State Health Officer.

Table showing preliminary requests for Federal assistance in the construction of general hospitals and public health centers

Name of project	Location	New	Addition	Category	Num- ber beds	Estimated total cost	Estimated Federal share	Area
Ouachita General Hospital.....	Hot Springs.....		X	General.....	30	\$675,000	\$450,000	I-13
North Little Rock City Hospital.....	North Little Rock.....	X		do.....	100	2,250,000	1,500,000	B-1
Washington County Hospital.....	Fayetteville.....		X	do.....	55	1,800,000	1,200,000	I-3
White County Public Health Center.....	Searcy.....	X		Public health center.....		75,000	50,000	R-2
Scott County Hospital.....	Waldron.....	X		General.....	30	390,000	260,000	I-2
Crittenden County Hospital.....	West Memphis.....		X	do.....	40	750,000	500,000	I-6
Magnolia City Hospital.....	Magnolia.....		X	do.....	30	600,000	400,000	I-12
Stuttgart City Hospital.....	Stuttgart.....		X	do.....	20	240,000	160,000	R-17
Woodruff County Hospital.....	Augusta.....	X		do.....	25	375,000	250,000	R-2
Memorial Hospital.....	Siloam Springs.....		X	do.....	20	240,000	160,000	R-25
Marked Tree City Hospital.....	Marked Tree.....	X		do.....	20	300,000	200,000	I-6
Wilson City Hospital.....	Wilson.....	X		do.....	20	300,000	200,000	R-13
Cleburne County Hospital.....	Heber Springs.....	X		do.....	20	300,000	200,000	R-2
Lincoln County Hospital.....	Star City.....	X		do.....	25	375,000	250,000	I-8
Cross County Hospital.....	Wynne.....		X	do.....	15	150,000	100,000	R-15
Booneville City Hospital.....	Booneville.....	X		do.....	20	300,000	200,000	I-2
Faulkner County Public Health Center.....	Conway.....	X		Public health center.....		66,000	44,000	R-3
St. Bernard's Hospital addition.....	Jonesboro.....		X	do.....	40	900,000	600,000	I-5
Total.....						10,086,000	6,724,000	

ARKANSAS LIBRARY COMMISSION,
Little Rock, Ark., January 20, 1959.

Hon. J. W. FULBRIGHT,
*Senate Office Building,
 Washington, D.C.*

DEAR SENATOR FULBRIGHT: I thank you for your telegram giving me the information about the Library Services Act budget. I am disappointed that President Eisenhower and his budget committee have failed again to give us the full amount which the Library Services Act permits. The budget recommendation should have been the \$7,500,000 instead of the \$5 million. With the maximum amount we are not able to do what should be done in the field of adult education.

For the fiscal year ending June 30, 1958, Arkansas received \$107,532. This money was spent to improve rural library service in all areas of the State. Here at the headquarters library we have been able to process books and get them ready for circulation immediately after they are delivered to us from the publishers and jobbers. For your information I am giving you the figures on how much was spent in each of the projects for the fiscal year July 1, 1957-June 30, 1958.

State agency: Book processing, bookmobile service_____	\$39, 730
North Arkansas regional, Harrison, Ark_____	19, 063
White-Woodruff, Searcy, Ark_____	11, 220
Crittenden-Mississippi, Osceola, Ark_____	19, 929
Southwest Arkansas regional, Nashville, Ark_____	16, 279
Arkansas Valley regional, Dardanelle, Ark_____	317
Bradley-Cleveland, Warren, Ark_____	992
Total_____	107, 530

We are just beginning the development of the Arkansas River Valley Regional Library at Dardanelle and the Bradley-Cleveland County project at Warren. This accounts for the small amount spent in these two projects. We will be spending more on these projects in the present fiscal year from the \$6 million appropriation which we were able to secure. Last year Arkansas' share was approximately \$130,000. We are continuing the projects which are listed in this letter. We wish very much to add other projects which have qualified since the general election November 4, at which time eight counties in the State passed the 1 mill library tax. These counties are Carroll, Chicot, Cleveland, Izard, Nevada, Pike, Montgomery, and Stone. Our policy is to use this money in areas where several counties agree to share the use of the bookmobile and to work under the administration of one qualified librarian. Plans are in the making for the extension of service from Garland County in Hot Springs to Montgomery County. From Cleburne-Independence at Batesville to Stone and Izard Counties, from southeast Arkansas regional at Monticello to include Chicot County. All of these boards have met since November 4 to plan their methods of cooperation. Commission trustees and staff members have met with these boards at night and on Sundays in order to meet the deadline for the commission board meeting which was held Saturday, January 17, in this office.

We are counting on the full appropriation for the Library Services Act in order that we may help these people who have done their best at the local level. We do not see how President Eisenhower and his budget committee overlook the importance of the circulation of good reading material to our rural people. In the national economy there is no greater hindrance than our failure to develop human resources of our low-income States.

Since January 1, 1958, new library buildings have been built through local efforts in the following towns in Arkansas: Cleburne-Independence Regional Library, with headquarters at Batesville, North Arkansas Regional Library headquarters at Harrison, West Memphis Public Library at West Memphis, DeWitt Public Library at DeWitt, Arkansas Valley Regional Library at Dardanelle, and the Bradley County Library with headquarters at Warren.¹ All of these libraries have been built in the hope that they would be able to participate in the Federal aid program to improve library service to rural patrons. Other library buildings are being planned. All over the State there is a renewed interest in the improvement and use of the public library.

Our own State legislative council has approved a 30 percent increase in our State aid fund from \$100,000 per year to \$130,000 per year. We are trying to

¹ The Barton Public Library, the gift of Col. T. H. Barton to the people of El Dorado and Union County.

improve our libraries at the local level with local money and at the State level with State money. Neither of these sources is sufficient to provide the books and library service which we need. With millions being appropriated for National Defense Educational Act we need the \$7½ million appropriation more than ever in order that the parents of the children and the adult citizens of our rural areas may become well informed and more interested in a better way of life. Poverty and ignorance are our two greatest hindrances to progress. I know you will do everything you can to help us. I am grateful to you for your insight into our problems and for your diligent efforts to improve conditions in our State. If we can furnish you with information which will help our cause please let me know.

With best wishes, I am,
Sincerely yours,

Mrs. KARL NEAL,
Executive Secretary and Librarian.

INTERSTATE CONFERENCE OF EMPLOYMENT SECURITY AGENCIES

STATEMENT OF A. J. WEEMS, CHAIRMAN, COMMITTEE ON ADMINISTRATIVE GRANTS

GENERAL STATEMENT

Senator HILL. We will next hear from A. J. Weems, chairman of the committee on administrative grants, Interstate Conference of Employment Security Agencies.

Mr. Weems, we are glad to have you here, sir.

Do you want to put your full statement in the record?

Mr. WEEMS. Yes, sir.

Mr. Chairman, my name is Jack Weems. I am chief of the management analysis division of the Alabama Department of Industrial Relations and am chairman of the committee on administrative grants of the Interstate Conference of Employment Security Agencies. The conference is an organization made up of the State administrators and other officials of the 51 State and Territorial employment security agencies. Our organization is dedicated to improving the effectiveness of the employment security program throughout the Nation.

The conference committee on administrative grants works closely with the Bureau of Employment Security of the U.S. Department of Labor in the matter of administrative financing of the unemployment compensation and employment service programs in the States. It has been my privilege to be a member of this committee for the past 10 years and its chairman for the past 2 years.

The president of the conference, the Honorable John Morrison, executive director of the employment security division of the Kansas Department of Labor, would normally represent the conference at this hearing. Unfortunately he is unable to appear before you today due to legislative commitments in his own State. In his absence, he has authorized me to represent the conference. My appearance here is in behalf of the administrators of the employment security program in all States.

POSITION OF STATES

We appreciate this opportunity to present the States' position regarding the House reduction of \$12,865,000 in the request for grants to States for administration of the unemployment compensation and employment service programs in the fiscal year 1960. In making this

reduction, the House gave as its principal reason "an improvement in the unemployment situation." The States have no disagreement with this reasoning by the House, but we do want to point out and discuss with you two major areas of deficiency in the request which prompt the conference to appeal to this committee for a full restoration of the House reduction.

The first of these areas concerns the employment service. The request by the administration for employment service operations in the fiscal year 1960 is completely inadequate. The request provides for only 5.5 million job placements, or about the same number as for the recession year 1958. The going annual rate is now 6.5 million. We do not think the going rate will necessarily hold for fiscal year 1960, but it has been conservatively estimated that placements will be at least at a level of about 6.25 million for the year, or about 750,000 more than is provided for in the request. This increase will cost \$5.5 million more than is in the request.

REASONS FOR INCREASED PLACEMENT FORECAST

There are two good reasons for forecasting this increase in placements. First, the improvement in the economy on which I need not elaborate and, second, a concerted effort on the part of the Department, the Bureau, and the State employment security agencies during the past several months to improve the effectiveness of the employment service.

In connection with the latter point I want to say very frankly to this committee that the Secretary of Labor, in addressing the annual meeting of the Interstate Conference of Employment Security Agencies in Chicago in October 1958, was critical of the effectiveness of the State employment services. He pointed out a number of areas of deficiency and urged the States to strengthen and improve the program.

Since the Chicago meeting there has been a determined and concentrated drive to strengthen employment service operations throughout the country. Two national meetings were held under the sponsorship of the Federal Bureau of Employment Security, with emphasis directed to means of improving the areas of deficiency which the Secretary had noted. In addition, the States have actively and aggressively followed up with a series of individual actions designed to give top priority to improving employment service operations. Not since the early days of the program has administrative attention been focused on the employment service to the extent that it is today.

RESULTS OF INCREASING PLACEMENT RATE

The results to date are most encouraging. I have already told you of the increase in the going rate of placements. I should add that this increase is currently being paid for principally from savings effected by reductions in other workloads and by shortcutting the quality of operations. But this cannot continue. Quality in all of our employment security operations is essential to the integrity and adequacy of the program. The amount of the request for the fiscal year 1960 will permit little or no room for the savings we have been able to make this year. The \$5.5 million increase we are requesting will not only make it possible to capitalize on the efforts for improvements in the employ-

ment service program to date, but, more importantly, will permit us to adequately serve a growing work force and to fill the increasing number of jobs resulting from a returning prosperity.

“PERSONNEL ADJUSTMENT” BY HOUSE

Let me now turn to another major area of deficiency in the request and one in which we disagree with the House action. This is the so-called personnel adjustment reduction, or what the House committee in its report terms “increase in costs due to greater normality in operations.” This is really a built-in horizontal cut, which is made before the request even reaches the Congress. It amounts to 2,415 man-years, or about \$13 million which must be absorbed by the States. This they are incapable of doing without serious damage to the balance of the program. The administration’s budget request sought restoration of \$2,165,000 of this amount in the fiscal year 1960, which was disallowed by the House.

The States have consistently contended that the absorption of this horizontal cut constitutes a cut in the quality of performance and service. It arises out of emergency shortcuts and corner cutting in operations that are neither desirable nor capable of being extended into normal operations. If, as some proponents of this absorption concept have argued, there is a volume aspect associated with these theoretical savings, they must concede that in periods of declining claims loads, such as anticipated for fiscal 1960, this factor disappears. In truth, it is only another type of cut that the States must deal with, coupled to the general budget adjustments with which we find ourselves confronted each year. On the one hand, the States are allocated a workload to be accomplished during the year, but to the extent of cuts, such as the one I have just mentioned, they are not adequately financed to accomplish the workload and maintain the necessary quality in the program.

SENATE RESTORATION ASKED

It is important that the Senate not only restore the \$2,165,000 by which this item was cut by the House, but that the balance of the House reduction not required to finance current employment service levels be applied toward elimination of this adjustment. It is unfortunate that this balance is not sufficient to entirely correct the situation. It will be a substantial improvement and will pave the way, we trust, for complete elimination of this factor in the appropriation request for the fiscal year 1961.

In considering this so-called personnel adjustment, as well as the other reductions made by the House, I think this committee should know that the administration’s request for grants to the States for fiscal 1960 represents a reduction in the States’ request to the Bureau of Employment Security of over \$30 million. The States requested about \$359 million, whereas the administration only asked for about \$329 million. You can see we are already faced with a substantial reduction from what we estimate our needs to be.

STATES AWARE OF COST INCREASE

Mr. Chairman, the States are aware of the increasing costs of this program and our obligation to keep expenses to a minimum. We

feel we have met this obligation squarely. Unfortunately we are not our own masters in the matter of increased cost. Some of it has come about because of new programs growing out of legislation enacted by the Congress, some of it from the expansion of basic programs due to normal growth in our economy, while much of it is attributable to inflation. A report by the Bureau of Employment Security on increases in the cost of the program in the past 10 years which was made to the House Committee on Appropriations earlier this year illustrates this most effectively. I understand copies of the report have been given to this committee.

Before closing, I want to emphasize that while funds for grants to the States for administration of this program must be appropriated by the Congress, they come from a special payroll tax of three-tenths of 1 percent on all covered employers. The amount available from this tax has been enough to pay the administrative costs of this program over the years and return a substantial profit of many millions of dollars to the Federal Treasury. For the fiscal year 1960, I understand tax collections are conservatively estimated at \$343 million, substantially more than our total request.

In closing, may I say that an appearance before a committee such as this is the one direct opportunity that the States, which have the responsibility for administration of this program and are the most vitally affected parties, have to be heard. We do submit an indication of our needs and advise with the Bureau of Employment Security, but we have no voice in the decisions on how much is requested of the Bureau of the Budget and how much is contained in the President's request. This is no criticism on my part of our State-Federal relationship, only a belief that we are "partners-in-interest," not "outsiders."

Thank you for this opportunity to present these views on behalf of the State employment security agencies.

Senator HILL. Mr. Weems, you have brought us a very clear and a very informative statement, a strong presentation of the case, and we want to thank you and express our appreciation for your being here with us and bringing us this splendid statement.

We appreciate it very much. Thank you, sir.

We are going to have to take a little recess until 2 o'clock. Is there anyone here who has to catch a train or a plane or has a very short statement?

NATIONAL COUNCIL OF STATE PUBLIC WELFARE ADMINISTRATORS

STATEMENT OF THOMAS J. S. WAXTER, CHAIRMAN

GENERAL STATEMENT

Mr. WAXTER. I am from Baltimore, Senator, and I would only take about 3 or 4 minutes.

Senator HILL. Good. Come on up, sir.

You recognize, as Shakespeare said, that brevity is the soul of wit. Is that right?

Mr. WAXTER. Yes, sir.

Sometimes you can get more with it than without it.

Senator HILL. We will be happy to hear from you, sir.

Mr. WAXTER. I am the chairman of the National Council of State Public Welfare Administrators.

Senator, we just want to make as positively as we can two points.

Senator HILL. All right, sir.

HOUSE CUT IN TRAINING AND RESEARCH

Mr. WAXTER. We were distressed to find that the House had taken out of the appropriation bill the \$1,785,000 that the administration had recommended for training and research. We are administering a program of billions of dollars a year. We do not have people who are properly trained for its administration across the board. We know that there must be better ways of doing many things than the way that we are doing them. We are so engaged in the day-to-day task of what we are doing that sometimes we cannot see the forest for the trees. And we believe that the authorization of \$5 million for research and \$5 million for training was—we are beginning to realize that in the field of working with human beings, just as much is needed in the way of knowing what you are doing as in any other field.

SITUATION IN SCHOOLS

Yesterday, I went to one of our normal schools, where they were graduating a lot of teachers. And the States of the Union, the Federal Government, paying millions of dollars for the training of people in various fields—and here is a program in which the Federal Government has at least 50 percent of the stake in terms of Federal money, and we just cannot get off the ground any money for training or any money for research. And we were just shocked. We were told, "You know, we thought we had won a great victory in 1956 when we got the authorization of \$5 million for training and \$5 million for research." And here, first the administration does not put it in, and then when the administration this year does put in a pittance, in terms of the need, we find that the House has knocked it out. And we would plead with you, because we know over the years your sympathy with the public assistance program, that in things like aid to dependent children, we are spending millions of dollars, and we just desperately need people with training to find out how we can be of real assistance to innumerable children and mothers in this country and get them back to a proper way of living, without just sending in that check month by month, without any realization of what we are doing on a broad basis.

And when we sit here and listen to the pleas that are made for money for all kinds of research and training in the field of health and national sciences and everything else, and realize that with this tremendous program and with these innumerable people that need all kinds of assistance, we just cannot get off the ground in terms of training in research and public welfare. And I wish there were some way that we could get to the people that comprise this committee of the U.S. Senate, in showing them how vital it is to do something in this field.

FUNDS FOR CHILD WELFARE

The second thing that we would like to direct your attention to is the fact that in the field of child welfare—I can talk about my own

State, a small State of 3 million people—we have a pretty good children's program, and we have it largely because of the grant-in-aid program from Child Welfare, where we have some money in terms of trying new things and breaking the ground into the future. And we do hope that the \$13 million that the House has passed will be increased to the full ceiling of \$17 million; or that in some way you will realize how vital it is to have projects and to start off in this field in the areas of doing something for children.

I do not know what we could do if we could just get you behind us with that amount for training and research. It is as badly needed as anything we can think of in the country to begin to get us off the ground and not spending money, being so engaged in the doing of it that we do not understand many of the problems that are involved.

Senator HILL. I may say, Mr. Waxter, that we have had some other splendid testimony from the representatives of the Department itself which certainly sustains and supports the position you have taken here this morning about this research and training. It will mean not only a better and more valuable and more meaningful service to the beneficiaries, but over the long run it will mean more economic operation.

Mr. WAXTER. That is right. And we will be able to do something for children and for families.

Senator HILL. That is right. And I want you to know you have made a very earnest plea here this morning, and I want to thank you for it and express my appreciation, sir.

Mr. Waxter, we will print your statement in full in the record, of course.

(The statement referred to follows:)

Mr. Chairman and members of the subcommittee, my name is Thomas J. S. Waxter. I appreciate the opportunity of appearing here today to represent the American Public Welfare Association, of which I am chairman, National Council of State Public Welfare Administrators, and to testify with respect to the appropriations for the Social Security Administration bill H.R. 6769. My official position is that of director, State Department of Public Welfare, Baltimore, Md.

The American Public Welfare Association is a national nonpartisan organization of local and State public welfare departments and of individuals engaged in public welfare at all levels of government. Its membership includes State and local welfare administrators, board members, and welfare workers from every jurisdiction.

Within the association are a number of national councils including a council representing all State administrators of public welfare, a council of local administrators of public welfare, a council of members of State and local boards of public welfare, a council of field representatives, a council of child welfare directors, and five standing program committees of which the Welfare Policy Committee is one.

The agencies and individuals making up the membership of the American Public Welfare Association are charged with the responsibility for administering the various assistance and service programs in public welfare under the several titles of the Social Security Act. In our membership are the people who have the responsibility for day-to-day administration of the programs for the needy aged, the needy blind, the needy disabled, needy dependent children, and child welfare.

Through our organization, we work toward constructive ways to help restore as many persons as possible in the public assistance caseload to self-care and self-support. Our members seek through protective, preventive, and rehabilitative services to help solve the problems of children and families who request the services of public welfare departments. We are constantly seeking ways to make our services more effective and to improve the caliber of administration in public welfare programs.

The official policy position for the association on Federal legislation will be found in our "Federal Legislative Objectives—1959," a copy of which will be filed with your committee with my statement.

PUBLIC ASSISTANCE

Before commenting on the appropriation request you now have under consideration, I would like to register with the committee the satisfaction our association has taken from the action of the Congress in 1958 in putting public assistance grants of Federal aid to the States on an averaging basis. By this action the Congress has greatly assisted State and local welfare departments in bringing greater flexibility into operations to an extent still not fully realized. We are most grateful for this change. Public welfare programs throughout the country are also benefiting for the variable grant feature added in 1958. Both of these principles have been long-time objectives of the association.

In commenting on the appropriation, I wish to assure you that we in the State and local department share your concern that appropriations for public assistance must be increased. This applies not only to the Federal budget but to most State and local budgets as well. We believe, however, that these increases are essential, and we support the request for funds made by the Department.

There are several reasons for this.

1. There are more people each year and therefore, even though the percentage needing public welfare services does not increase, there are more for us to take care of.

2. Costs of the things the people buy and of the services we buy or provide for them are increasing.

3. Because the people we help are, more and more, in need because of serious health problems, we are increasingly being required to meet the medical and hospital needs of these disabled and disadvantaged persons in our communities. And these costs, I am sure you realize, are rising alarmingly.

4. We must cope with the lingering effects of the recession which results in our needing to take care of many families where the unemployed worker has exhausted his insurance payments—if indeed he was entitled to any. This continuing unemployment also reflects itself in applications from individuals who have been assisted by their children and other relatives, now unemployed and unable to continue such help.

5. Public welfare agencies are getting into full swing to carry out the mandate of Congress in 1956, when the Congress authorized public welfare departments to provide services to help maintain and strengthen family life and to help restore persons to self-support and self-care.

I would observe that the States and localities are still "going it alone" in financing the not inconsiderable problem of the unemployed and unemployables who are not now qualified for any of the existing federally aided categories.

Finally, we wish to point out our continuing support of open end appropriations in public assistance. We believe this policy to be necessary because of the impossibility of predicting with accuracy what the economic conditions leading to financial dependency may be. This position is supported in our legislative objectives.

RESEARCH AND TRAINING

Now I would like to comment particularly on a small but to us very important request for a new appropriation which is being made by the Department. This is the request for \$1,785,000 for staff training and for research in reducing dependency.

The House Committee on Appropriations did not allow the request for \$1,785,000 for this new program. I strongly urge that this item be included in the 1960 appropriations for the Department.

We accepted the charge given us by the Congress in 1956 when for the first time the objective of the restoration of recipients of assistance to self-support and self-care was included in the Social Security Act.

We agreed with the objective because we knew of the untouched potential for improvement that exists in many of the people we serve and because we have experienced in a limited way the satisfactions there are both for the people and our workers when better social functioning is achieved.

Many States and localities have engaged in experimental work along these lines and we know such work pays off.

However, we need more skillful and better trained workers than any of us have to attain our ends. We had hoped that when the objective was stated, there would be funds made available to step up our training programs. Such funds were authorized by the Congress, but there was no appropriation made then nor has there been any since.

The funds requested in this budget would help us in two ways. They will help us to send some of our existing staff members to schools and institutes to upgrade their knowledge and skills.

They will help us also as we compete with other people-centered programs for young people at the point of choosing their careers. For instance, many young people who might be interested in our work turn instead to teaching because they can go to one of our many teachers' colleges tuition free. Many young women turn to nursing because they can secure free education. Our early hope is to have scholarship funds available for selected and likely young people to put us on a par with these and other programs.

There need be no fear that these few funds for training will result in loss of jobs for present staffs. Most welfare departments have vacancies. Even if all the graduates of our schools of social work were to come to public welfare, it would take more than a generation to train the needed staffs.

Included in the appropriation request is a stipulated amount for special studies and research. Millions are expended annually for research in the area of physical health and we are making good beginnings in the field of mental health.

The results of these research efforts have some effects in reducing our assistance loads. However, there is a large area of human behavior, dependency causes, and delinquency prevention in which relatively little significant research is being carried out. We desperately need more studies and research in this area and we seek the approval of the Congress for this modest appropriation.

CHILD WELFARE SERVICES

The association was pleased that the Congress last year took favorable action resulting in the achievement of another of our long-time objectives, namely, removing the rurality and special need clause from child welfare grants to States. This is particularly helpful to public welfare agencies in strengthening the statewide basic child welfare services which are so essential in meeting the needs of children, and in helping to prevent juvenile delinquency.

The House of Representatives, in H.R. 6769, increased the appropriation for maternal and child welfare service by \$3 million, \$1 million of which is for child welfare services. This increase will be of great assistance to the States in expanding urgently needed services to children.

However, we believe that, in view of the growing need for such services, the full amount authorized last year by the Congress, \$17 million, should be appropriated.

Such an increase is needed if the States are to take full advantage of the possibilities for improved programs introduced by the 1958 amendments. These expanded services are urgently needed because of the growing complexity of our society, as well as the simple fact of our ever-increasing child population.

CONCLUSION

We in the American Public Welfare Association, through our official responsibilities in the States and localities, deal each day with thousands of needy persons and families who apply for financial assistance and for a broad range of services. We know the problems of needy and troubled people at firsthand, people who cannot manage in our complex civilization without help. It is because of this experience and the fact that we know that we can strengthen the kinds of services which they require and in turn strengthen our human resources that we request this committee—

- (1) to appropriate funds to implement the law for the training of public assistance personnel,

- (2) to appropriate funds to implement the law for research and demonstration projects to investigate causes of dependency and more effective ways of dealing with this basic problem,

- (3) to appropriate for the States the full amount authorized for State and local child welfare services,

- (4) to appropriate funds needed for the administration of the Office of the Commissioner of Social Security, the Bureau of Public Assistance, and the Children's Bureau,

(5) to appropriate the full amount needed for State and local assistance payments, administrative and service costs, so that we may continue our well-established Federal-State partnership in administration.

FEDERAL LEGISLATIVE OBJECTIVES, 1959—AMERICAN PUBLIC WELFARE ASSOCIATION

Prepared by Committee on Welfare Policy—Approved by the board of directors,
December 15, 1958

The American Public Welfare Association believes that the States and their political subdivisions have the primary responsibility for developing and administering effective public welfare services in the United States. The Federal Government has the obligation to develop nationwide goals and to use its constitutional taxing power to equalize the financing of public welfare so that public welfare services may be available on a reasonably equitable basis throughout the country. The States, their political subdivisions, and the Federal Government, in cooperation, must provide the leadership and the professional and technical personnel to carry out these obligations. The association's legislative objectives are based on these premises and on the recognition of the importance of preserving and strengthening family life, encouraging self-responsibility, and assuring humanitarian concern for individuals and families.

To accomplish these purposes the association believes that—

Contributory social insurance is a preferable governmental method of protecting individuals and their families against loss of income due to unemployment, sickness, disability, death of the family breadwinner, and retirement in old age;

Public welfare programs should provide effective services to all who require them including financial assistance and preventive, protective, and rehabilitative services, and these services should be available to all persons without regard to residence, settlement, or citizenship requirements;

The benefits of modern medical science should be available to all; and to the extent that individuals cannot secure them for themselves governmental or other social measures should assure their availability;

Democracy has a special obligation to assure to all the Nation's children full and equitable opportunity for family life, healthy growth, and maximum utilization of their potentialities.

These general principles are amplified in other policy statements approved by the board of directors of the association. The welfare policy committee of the association has reviewed all of these statements in the light of current needs and has developed specific legislative objectives for 1959. While the following list does not include all of the association's policy positions, it presents in condensed form those immediate and longer range legislative objectives which are most likely to be of current significance in improving public welfare services.

PUBLIC WELFARE PROGRAMS

Scope of program

1. The comprehensive nature of public welfare responsibility should be recognized through Federal grants-in-aid which will enable the States to provide not only financial assistance (including medical care) and other services for the aged, the blind, the disabled, and dependent children, but also general assistance and services for all other needy persons.

2. Federal financial aid should be available to assist States in carrying out public welfare responsibility for preventive, protective, and rehabilitative services to all who require them, irrespective of financial need.

3. The Federal Government should participate financially only in those assistance and other welfare programs which are available to all persons within the State who are otherwise eligible without regard to residence, settlement, or citizenship requirements.

4. The aid to dependent children program should be strengthened by providing Federal aid to the States for any needy child living with any relative.

5. Specific provisions should be made for Federal financial participation in the maintenance of children who require foster care.

6. Child Welfare Services in the Social Security Act should be broadened in scope, and the funds authorized and appropriated should be increased in all States sufficiently to extend and improve their programs compatible with the growing child population and the continuing advances in knowledge which make more effective services attainable.

Specific provisions should be made for Federal financial assistance to States to stimulate and support programs for the prevention and control of juvenile delinquency. This should include research and the training of personnel.

7. The category of aid to the permanently and totally disabled should be modified by eliminating the Federal restriction requiring a disability to be permanent and total and by eliminating the age requirement so that all needy disabled persons may be aided under the program.

8. The Federal Government should participate financially in the development of specialized services for the aged, irrespective of financial need.

9. The Federal Government, in cooperation with the States, should study the restriction on Federal financial participation in assistance payments to adults living in public nonmedical institutions.

Methods of financing programs

10. The continuation of the Federal open-end appropriation is essential to a sound State-Federal fiscal partnership in all aspects of public assistance. Since it is not possible to predict accurately the incidence and areas of need, flexibility is necessary in financing public assistance programs.

11. Federal financial participation should be on an equalization grant basis provided by law and applicable to financial assistance (including medical care), welfare services (including child welfare), and administration.

12. No change should be made at this time in the Federal matching formulas which would result in a reduction in the Federal share of assistance, services, or administration.

13. Maximums on Federal participation in public assistance (including medical care) should continue to be related to the average payment per recipient and should be sufficient to assure reasonable standards of maintenance, comprehensive medical care, and the preservation and strengthening of family life.

Federal participation in aid to dependent children should be increased to a level which will assure treatment of children equitable with that accorded other public assistance recipients.

14. Federal aid for public assistance should be on the same basis for Puerto Rico, the Virgin Islands, and Guam as for other jurisdictions. In particular, the annual dollar limitations on Federal participation should be removed.

15. The Federal Government should participate financially in the costs of any State and local civil defense welfare services.

16. Federal legislation should provide funds for American nationals in need of assistance and other services who are repatriated from abroad.

Administration

17. Adequate and qualified personnel is essential in the administration of public welfare programs. Federal financial participation in administrative costs of State welfare programs should be sufficient to enable States to provide for the adequate administration of all welfare programs.

18. Adequate Federal funds should be authorized on a permanent basis to assist States in training staff for State and local public welfare programs and moneys should be appropriated for this purpose.

19. Public welfare programs in which the Federal Government participates financially should be administered by a single agency at the local, State, and Federal level.

20. Federal, State, and local public welfare agencies should participate in and assist in the administrative coordination of all related programs in which there is Federal financial participation.

21. The administration of the Children's Bureau should be maintained within the Social Security Administration.

SOCIAL INSURANCE PROGRAMS

OASDI

22. The contributory old-age, survivors, and disability insurance program, as a preferable means of meeting the income-maintenance needs of people and as a means of keeping the need for public assistance to a minimum, should be strengthened by making benefit payments more adequate; by increasing the amount of earnings creditable for contribution and benefit purposes in line with current conditions; by providing benefits for disabled insured persons of any age and for their dependents; by extending coverage to earners still excluded.

23. Health costs of old-age, survivors, and disability insurance beneficiaries should be financed through the OASDI program. Arrangements for achieving this objective should take into account the priority needs of the groups to be

served; availability of facilities, personnel, and services; and protection and encouragement of high quality of care, including the organization of health and related services to effect appropriate utilization of services and facilities.

24. The funds of the insurance program should be available to help restore persons on the OASDI disability rolls to gainful employment since such expenditures would result in a net saving to the fund and increase the number of persons rehabilitated.

25. To the extent that changes to improve the OASDI program increase the cost of the program, contributions should be increased to insure the financial stability of the program.

26. The membership of the Advisory Council on Social Security Financing, established by the 1956 amendments, should include representation from public welfare and its functions should be broadened to include responsibility for recommending improvements in all aspects of old-age, survivors, and disability insurance, with particular emphasis on methods of keeping the program in line with current economic conditions and with changes in levels of living.

27. Adequate and qualified personnel are essential in the administration of the old-age, survivors, and disability insurance program. Federal funds should be utilized for the professional training of staff in institutions of higher learning.

Unemployment insurance

28. The unemployment insurance program as a preferable means of meeting the income-maintenance needs of unemployed people and as a means of keeping the need for public assistance to a minimum, should be strengthened by establishing Federal standards which would assure: more adequate benefit payments including benefits for dependents; extension of coverage to earners still excluded; provision for a minimum duration of benefits and appropriate extension of the duration during any period of extended unemployment; provision for more equitable eligibility conditions; provisions for less restrictive disqualification requirements; and an increase in the amount of earnings creditable for contribution and benefit purposes in line with current conditions.

Other social insurance

29. Study should be given to ways of improving and extending, on a sound social insurance basis, temporary disability insurance benefits and workmen's compensation programs, with emphasis on planning for effective medical care and vocational rehabilitation.

RESEARCH AND DEMONSTRATION PROJECTS

30. Federal funds should be authorized and appropriated for research and demonstration projects in all aspects of social security and public welfare.

RELATED PROGRAMS

31. The Federal Government should provide leadership, funds and research for the promotion of health and the prevention of sickness and disability contributing to dependency. Federal health programs should encourage and enable State and local health departments to make a more effective contribution to broad programs of physical restoration. In view of the increasing number of children and the increasing cost of medical service, the amounts authorized and appropriated for maternal and child health and crippled children's services in the Social Security Act should be increased.

32. Public welfare has a responsibility to assure that comprehensive rehabilitative services are made available to persons who require them. In carrying out this objective, public welfare programs have the responsibility to restore individuals to self-care and independent living and to strengthen family life. As part of this responsibility, public welfare agencies are concerned with the availability of adequate vocational rehabilitation services for individuals who can benefit from them.

Since many eligible individuals in the United States still are deprived of vocational rehabilitation services, such services should be strengthened so that all vocationally handicapped persons who present reasonable possibilities of attaining a vocational objective would be served. The vocational rehabilitation program also should be strengthened by permitting States to designate the State agency which can most effectively administer this program.

33. Federal programs should provide more effective aid to help meet the needs of mentally retarded and other handicapped children.

34. The nonquota entry of foreign-born orphans should be limited to children who are placed for adoption in the United States with the approval of authorized social agencies, and to children who are adopted abroad by U.S. citizens residing in the country where the adoption takes place.

35. The Federal Fair Labor Standards Act should be amended to extend coverage and to increase the minimum wage in line with current conditions.

COMMITTEE RECESS

Senator HILL. Is there any other witness that cannot be back this afternoon at 2 o'clock?

We will stand in recess, then, until 2 o'clock.

(Whereupon, at 12:45 p.m., the subcommittee recessed, to reconvene at 2 p.m., the same day.)

AFTERNOON SESSION (MONDAY, MAY 18, 1959)

Senator HILL. The subcommittee will kindly come to order.

AMERICAN NURSES' ASSOCIATION

STATEMENT OF MISS JULIA C. THOMPSON, REPRESENTATIVE

GENERAL STATEMENT

Senator HILL. Miss Julia Thompson, we will be very happy to have you come up here and we are very glad to have you back with the committee.

Miss THOMPSON. Thank you, Mr. Chairman.

I am Julia C. Thompson, Washington representative of the American Nurses' Association, the national organization of registered professional nurses.

The ANA has over 190,000 members in 54 constituent State and Territorial associations. I appear here today to present the associations' views on certain items relating to nursing in the budget for the Department of Health, Education, and Welfare in H.R. 6769.

The ANA is vitally interested in all programs of the Department of Health, Education, and Welfare and believes in the principle of Federal support for research and public health programs. In discussing budget allocations, however, the ANA believes it should restrict its comments to those items directly related to nursing on which the profession is competent to speak.

HOUSE COMMITTEE REPORT

We were pleased to note that the items on which we wish to speak were mentioned in the report accompanying H.R. 6769 from the House Committee on Appropriations.

On page 11, the report states:

The committee was impressed with the testimony concerning the work of the Division of Nursing Resources and hopes that efforts will be made to facilitate this important work.

On page 9, the report states:

The committee's attention has been called to the career development program of the Division of Public Health Nursing. Little, if any testimony has been given on this subject by the Public Health Service officials. The committee hopes this is not an indication they feel such a program is unimportant, and expects more information on it during next year's hearings.

DIVISION OF NURSING RESOURCES

The Division of Nursing Resources in the Bureau of Medical Services, Public Health Service has, over the past 10 years, worked to develop methods of increasing the Nation's nurse supply.

The Division has through research, the application of research findings, and consultation on a national scale assisted in the improvement of nursing service for our Nation's people. Service to States on resource and utilization studies has been a major contribution.

In this effort the Division supplies qualified consultants to States which finance their own studies. Such help has been invaluable in improving nursing care and in determining the discrepancies between the demand for nursing service and the supply within the 40 States served.

Requests for assistance and the need for expansion of the work carried on by the Division of Nursing Resources go far beyond what the Division can do within the \$330,000 item allocated in the current budget.

CURRENT BUDGET INSUFFICIENT

Present requests for service and present needs for the work of this Division would under current budget limitations, keep the Division busy for the next 2 years.

This would allow nothing with which to meet requests and needs in the months ahead.

In addition, it is vital that the Division have funds to expand its consultant service to assist States, hospitals, and other agencies to apply the findings of research in improving nursing care. It is through the application of these research findings that nursing care will be improved.

Further research is needed to find ways to increase the numbers of nursing personnel, to make better use of the skills of available nursing personnel, to improve and develop new skills as health care advances, and to remove obstacles which impair the functioning and recruitment of nurses.

Therefore, the American Nurses' Association urges that \$1 million be appropriated for the Division of Nursing Resources in the Public Health Service, the only research center for nursing in a Government agency.

NEEDS IN NURSING AREA

The need for expansion of research in nursing and the training of nurses qualified in this area is so great in the eyes of the nursing profession that the association's house of delegates approved the furtherance of such research as one of ANA's primary goals at the national convention in June 1958. The goal states that ANA will:

* * * stimulate efforts by nurses and other specialists to identify and enlarge the scientific principles upon which nursing rests and to encourage research by them in the application of these principles to nursing practice.

As more and more research is conducted in specific disease categories and other health areas, we need qualified nurses as part of the research teams. Observations and judgments require not only a knowledge of research principles and techniques but of health care, treatments and patient reactions as well.

NIH PROJECTS FOR NURSING

Since 1955, funds have been earmarked within the allocation to the National Institutes of Health for research projects and fellowships in nursing. The need for such funds is evidenced by the rapid growth of this program within the budget allowed—from one-half million 4 years ago to about 1 million this year. Even with 1 million, many eminently qualified persons had to be refused funds.

We were pleased to note that on page 16, the report from the House Committee on Appropriations states:

Another small but important activity financed with these funds is the program of nursing research fellowships and grants. The committee has provided sufficient funds in the bill so that this important program can be adequately financed.

H. R. 6769 includes \$36,404,000 for general research and services, \$7,430,000 more than the amount appropriated for 1959. We assume from the report that the committee has provided for nursing research in this increase.

FURTHER FUNDS NEEDED

The American Nurses' Association urges that at least \$2 million be earmarked from the total for fellowships and projects in nursing research under the National Institutes of Health.

Last year the former Public Health Nursing Branch was made the Division of Public Health Nursing in the Bureau of State Services. At the time, ANA commented favorably on this reorganization which, we believe, will improve the effectiveness of nursing service.

Although the nursing service has been accorded this status, funds for the new division are not separated in the total budget allotment for this area. Adequate funds must be assured the new division in order for it to carry out its important role in the Nation's public health program.

CAREER DEVELOPMENT PROGRAM

One of the division's most important activities, benefiting Federal, State and local public health services is the career development program. In the middle and late forties, about 20 nurses were being trained on assignment to local and State public health services as part of this program.

At the present time, only four of these training positions are provided in the budget. This number is not sufficient to take care of attrition, much less the expansion of service into areas of chronic disease and accident prevention.

It is known that during the past 8 years, 39 nurses were separated from the service and only 21 were recruited. Undoubtedly, retirement was only one of a number of reasons for these separations.

However, judging from the ages of the nurses now in the service, retirements in the future will widen this gap unless additional training positions are provided. Only eight of the nurses now in the service are 39 years of age or younger, 47 are over 50 and the remainder are over 40.

Although other division and branches within the Public Health Service can recruit nurse personnel themselves, they usually look to the Division of Public Health Nursing for assistance.

BUDGETED POSITIONS INSUFFICIENT

With only four positions budgeted, the Division must find it impossible to meet such needs for areas such as Indian health and heart disease control. It would be disastrous to recruit nurses to such services who had not had supervised work in public health, such as that provided by the career development program.

The ANA believes the Division of Public Health Nursing should have the funds necessary to carry on an adequate program in this area. We believe a minimum program would include 20 training positions, which would mean an addition of 18 to the present 4 at an additional estimated cost of \$94,500. The ANA urges that funds be allowed to provide for these 22 training positions.

EXTENSION TEACHING PROGRAM

Among the very successful programs handled by the Division last year was the extension teaching program offered at the University of Minnesota. Faculty was provided by the Division and over 400 nurses attended these sessions. This type of service strengthens and improves State and local health department nursing programs by bringing educational opportunities to many public health nurses who cannot leave their jobs and homes for extended study elsewhere.

Such programs are vitally important when you consider that of the estimated 24,1000 public health staff nurses practicing today, only 22.8 percent hold bachelor's degrees, the educational requirement considered basic for these positions.

SUMMARIZATION

In conclusion, I would like to summarize the budget allocations which ANA believes are necessary to the continued improvement of nursing care for the people of this country:

1. We urge that Congress appropriate 1 million for the work of the Division of Nursing Resources within the Bureau of Medical Services, Public Health Service.

2. We believe that 2 million should be earmarked for nursing research fellowships and grants within the funds allocated for general research and services under the National Institutes of Health and administered by the Division of Nursing Resources.

3. We urge that funds be provided to expand the career development program of the Division of Public Health Nursing, permitting 22 training positions, where now there are only four.

On behalf of the American Nurses' Association, I thank you for the opportunity of appearing before you to present the views of nurses on these appropriation items now before your committee.

Senator HILL. Miss Thompson, you made a splendid statement, as you always do, and we appreciate it very much.

Certainly, there is no part of the health front that needs strengthening more at this particular time than the nursing section; am I right about that?

Miss THOMPSON. We believe that, Mr. Chairman.

Senator HILL. I mean as we move forward with our health programs, and we have made some great strides of course in recent years, but we have to have this trained personnel.

Miss THOMPSON. We believe it is essential because so much of the work that is done in research is done with the patient and unless we have nurses who are prepared to work with them in the research team, the research flounders because so much depends on their observations and judgment.

Senator HILL. You certainly made that very clear and I want to thank you for your splendid statement. I appreciate it very, very much.

AMERICAN LIBRARY ASSOCIATION

STATEMENT OF GERMAINE KRETTEK, DIRECTOR, WASHINGTON OFFICE

GENERAL STATEMENT

Senator HILL. Next we will hear from the American Library Association, Miss Krettek. Is it nice to have you here. We welcome you back.

Miss KRETTEK. Thank you, sir. My name is Germaine Krettek. I am director of the Washington Office of the American Library Association, a nonprofit, professional association of more than 22,000 members, consisting of librarians, trustees, and friends of libraries interested in the development, extension and improvement of libraries as essential factors in the educational, social and cultural needs of our Nation.

FUNDS FOR LIBRARY SERVICES ACT

Under specific direction from the American Library Association, I am appearing before this subcommittee to urge that the full amount of \$7,500,000 authorized under the Library Services Act of 1956 be appropriated.

The amounts actually appropriated under the act for the first 3 years, and the amount of \$6 million voted by the House for fiscal 1960, total only \$19,050,000 or 63.5 percent of the \$30 million authorized for the first 4 years of this 5-year program. The total shortage through fiscal 1960 would thus be \$10,950,000, an amount equal almost to 2 years' appropriation under the current rate.

For the record, I should like to include a table showing this arithmetic in graphic form.

Senator HILL. All right, that will be inserted in the record.
(The information referred to follows:)

Arithmetic of the money situation

	Authorized	Appropriated	Shortage
Fiscal 1957-----	\$7, 500, 000	\$2, 050, 000	\$5, 450, 000
Fiscal 1958-----	7, 500, 000	5, 000, 000	2, 500, 000
Fiscal 1959-----	7, 500, 000	6, 000, 000	1, 500, 000
Fiscal 1960-----	7, 500, 000	¹ 6, 000, 000	1, 500, 000
Total-----	30, 000, 000	19, 050, 000	10, 950, 000

¹ Voted by House.

IMPLEMENTATION OF PROGRAM

Senator HILL. In other words, the program has not been carried forward as was planned and apparently contemplated at the time the act was enacted; is that right?

Miss KRETTEK. That is right.

Senator HILL. In no single year has the budget anything like recommended the full \$7,500,000 and although we have been able to raise the budget different years, we still have not had the funds that we contemplated when the act was enacted.

Miss KRETTEK. That is right. At that time it was estimated that \$7,500,000 a year was a minimum with which to accomplish the goals we envisioned.

Senator HILL. But we have not had that minimum.

Miss KRETTEK. Not in any year.

NEED FOR EXTENSION OF ACT

Senator HILL. Certainly the success of the program up to date and the fact that the program has been only partly carried out, as contemplated, would strongly suggest that the act should be extended.

Miss KRETTEK. I think it is becoming quite clear, although excellent progress has been made, that the goals are not going to be reached within a 5-year period.

Senator HILL. Well, we have not done the things we knew had to be done to reach those goals; is that true?

Miss KRETTEK. That is right.

Senator HILL. And to reach those goals we must extend the act; is that right?

Miss KRETTEK. It would seem very clear that the goals are not going to be reached without doing that.

You might be interested to know that the American Library Association is on record in favor of this extension at this time. We are making a progress study to see what the total library needs and responsibilities are in this country in relation to the overall educational program of the Nation.

Senator HILL. When do you expect to have the results of that study available, if I may ask?

Miss KRETTEK. We hope sometime this fall.

Senator HILL. The act expires in 1961, does it not?

Miss KRETTEK. Yes, Senator.

Senator HILL. The results of that study would be available to Congress next January?

Miss KRETTEK. Yes, sir.

UNENCUMBERED BALANCES

Now for a word regarding unencumbered balances for fiscal 1959. As you know, the allotments for each State are calculated on the basis of the ratio of the rural population of a given State to the total rural population of the United States, and varies according to the amount of the total grant—\$6 million, \$7 million, or \$7,500,000—or whatever it might be.

Once the allotment is made to a State it remains at that figure, and that State has the following fiscal year in which to pick up its full allotment for any current fiscal year.

The only way in which a State can release its money, is for it to certify formally to the Commissioner of Education that it will not use the allotment. To date, no State has certified it will not be using its 1959 funds.

Senator HILL. So far as we know now, each State will be using its 1959 funds?

Miss KRETTEK. Yes, sir.

To speak of approximately \$1 million—the Office of Education estimate, as stated in the House report on this appropriation bill—as being available in unencumbered balances needs qualification.

The small number of States with these balances are entitled to use them in fiscal 1960 and may not certify their release.

For example, Iowa at present may have \$70,000 in unobligated funds for fiscal 1959, but there is no assurance that such an amount will be available for redistribution to other States to add to any sums appropriated for fiscal 1960. At best, unencumbered balances are uncertain figures.

FULL AUTHORIZATION REQUIRED FOR NEW PROJECTS

Unless the full authorization of \$7,500,000 is available in 1960, it will mean that the States will not be able to initiate new projects; some of the towns and villages which have been planning and looking forward to having library service in 1960 and have already taken necessary legal action to provide necessary matching funds will be denied this opportunity; some projects already started may have to be curtailed. Every State already has more applications for library extension projects than it has local, State, and Federal funds to carry out the plans.

Senator HILL. In other words, the States are already to go right ahead with the program, they are providing their part of the funds and they have the plans all made and they are ready to go dependent on the Federal funds being made available; is that right?

Miss KRETTEK. That is right. I think it is interesting and very significant that the effect of the Federal stimulation program is that State funds for public library service in rural areas have increased over 45 percent since the program was initiated in 1956.

Senator HILL. Those are State funds?

Miss KRETTEK. Yes; in matching the Federal funds.

ABILITY OF STATES TO MATCH ALLOTMENTS

In order to find out the ability of the States to match their possible allotments under an appropriation of \$7,500,000 in fiscal 1960, the American Library Association, within the last month, canvassed all the State library agencies, except those three States not yet in the program—Delaware, Indiana, and Wyoming.

The replies are as follows:

Number reporting

Yes.....	40
Hope so.....	3
Most of it.....	2
Don't know.....	2
No.....	2
Total.....	49

At present, 50 States and Territories are participating in the Library Services Act of 1956. The small investment of Federal dollars in this venture of State, local, and Federal cooperation has paid excellent dividends. The money has been wisely spent; it has not gone into frills.

STIMULATION TO EDUCATIONAL DEVELOPMENT

From north, east, south, and west have come heartening accounts of what this Federal stimulation has meant to the educational development and progress of the Nation. To note only a few generalized results:

1. Under the Library Services Act, over 800 rural counties throughout the Nation with rural populations of over 11 million are now receiving new or improved public library service.

2. More than 120 new bookmobiles and other vehicles have been put in operation by the State library extension agencies to serve the populations of the villages, small towns, and farming communities.

3. Over \$7 million have been expended under the program to purchase books and other informational materials for these areas.

4. Under the State plans for the utilization of the Federal funds, 130 county and regional library projects have been organized to date. Authorities generally agree that the formation of such larger units of service makes existing resources go further.

5. State funds for the extension and improvement of public library service in rural areas have increased over 45 percent since 1956, the date that the library legislation went into effect.

On the evaluation of this program by nonlibrarians, I should like to quote from a feature article in the New York Times of November 16, 1958, which reads in part:

To satisfy the needs of book-hungry children in the western sandhills of Nebraska, a schoolhouse which had been on a bad road, was moved 2 miles to a good one so that the bookmobile could get to it in winter.

Reports from the States, however, show that there are still approximately 25 million persons without public library service in areas with 10,000 population or under and an additional 50 million with inadequate library service.

On the basis of the accomplishments of the Library Services Act to date; on the probability of the States matching the full authorization; on the basis of the work yet to be done; the American Library Association urges that in the fourth year of this 5-year program, the full \$7,500,000 be appropriated in fiscal 1960 for carrying out the purpose of the act.

Thank you very much for the privilege of appearing before this committee.

Senator HILL. Thank you for a very splendid statement and one most informative and one most helpful to us.

COMMUNICATION

Senator HILL. The director of the library extension of the Florida State Library has addressed a letter to me in support of a request for an appropriation of the full authorization of \$7.5 million for the library services. This letter will appear at this point in the record. (The letter referred to follows:)

FLORIDA STATE LIBRARY,
OFFICE OF THE LIBRARIAN,
Tallahassee, May 13, 1959.

Senator LISTER HILL,
U.S. Senate, Washington, D.C.

DEAR SENATOR HILL: We are pleased that you are on the Appropriations Committee which will be considering the appropriations which will activate the Library Services Act for 1959-60. This is a very important appropriation for the development of Florida's libraries.

I should like to review the library accomplishments in Florida since this program has been established. As you know, Florida was unable to match any funds during fiscal 1957 so the first \$40,000 was picked up in fiscal 1958 along with an additional \$55,308. This year we were able to match and allocate all but \$13,024. (You understand that our library expenditures regulate the amounts which we may receive.)

On October 1, 1956, Florida had 3 counties with countrywide library service. At this time there are 10 counties with countywide bookmobile service and community libraries. Nine of these are in the rural development grant program. They are: Leon, Suwannee, Lafayette, Alachua, Orange, St. Lucie, Okeechobee, Martin, and Collier Counties; \$80,292 has been used for grants to these counties for this fiscal year (October 1, 1958-September 30, 1959).

The State library board voted to use \$40,000 for improved State library services. Just about half the fund was used to improve the book collection and the rest was used to improve the extension department by adding 2 public library consultants and a secretary, to provide travel for them and equipment for the department. We now have 3 people to work with public libraries over the State, whereas I formerly tried to cover the State alone.

We have already had good results from the improved book collection. The book circulation was increased 82.4 percent in 1957-58 over 1956-57. And the use is still increasing although not quite so astronomically. In 1956 one person could answer most of the requests for help from public libraries and at this time 3 of us are unable to keep up with all the requests for aid and at the same time supervise the new project libraries receiving funds from rural development grants.

Requests for new grants for rural library service are already being made for 1959-60. These counties have already voted to establish library service and work as part of the Suwannee River Regional Library: Taylor, Madison, Hamilton, Columbia, and Gilchrist Counties. Monroe, Sarasota, Bay Citrus, Marion, Baker, and Bradford Counties have been working on countywide proposals. We know we cannot possibly have sufficient funds for all of them but we urge that the full authorization of \$7,500,000 be appropriated so that we may help as many counties as possible.

There are a number of counties interested in the program that may come through by another year so we cannot encourage any county to hold their library establishment 1 more year in anticipation of funds. We simply believe that the small amount of matching funds has provided the necessary encouragement. So we are counting on your support of the appropriation this year.

Thank you for your continuing interest.

Sincerely yours,

VERNA NISTENDIRK, *Director, Library Extension.*

AMERICAN PARENTS COMMITTEE

STATEMENT OF MRS. ADA BARNETT STOUGH, REPRESENTATIVE

GENERAL STATEMENT

Senator HILL. Next we have Mrs. Stough of the American Parents Committee.

We welcome you back as an old friend, one who is always helpful to us. We are very glad to have you before us this afternoon.

You have been very patient in waiting to come before us.

Mrs. STOUGH. Mr. Chairman, I wanted to tell you personally that Mr. Hecht was sorry he was not before you today, but with such short notice I am trying to represent him as best I can.

I do have about a five-and-a-half-page statement, but I do not think I will read it all. I would just like to file it and then emphasize the three points I would like to make.

Senator HILL. All right, we will be glad to have the statement appear in full in the record and then you can make such other comments as you would like to make.

(The statement referred to follows:)

Gentlemen, we in the American Parents Committee are here to urge you to increase the appropriations for the Department of Health, Education, and Welfare for three purposes—namely, more adequate funds to carry out the National Defense Education Act, increases in the three grants-in-aid for crippled children, maternal and child health, and child welfare, and increased staff for the Juvenile Delinquency Division of the Children's Bureau. The last item becomes imperative if the Children's Bureau is to carry out its part of the directive on juvenile delinquency issued in the report of the House Appropriations Committee. We are familiar with the case advanced by the President for a balanced budget for 1960. This is not the time and place to discuss the economic validity of his position. It is the place, however, to ask the question, "What is the price we will pay for a balanced budget in terms of human resources?"

Obviously a country is only as strong as the people who make up the country. Building stalwart, healthy, able, educated citizens for the future demands adequate health, educational, and welfare services for the children who are our responsibility today. This isn't a matter that can be postponed for 5 or 10 years just because we need to keep the Nation's bookkeeping in black figures in 1960. We have to provide these services and we have to find the money to pay for them.

The President himself, in his budget message, recognized the increasing responsibility in this field because of the rapid growth of population but his concern was not translated in the figures of his budget request.

We have 17 million more persons under 18 in this country today than we had 10 years ago. During the past year the child population was increased by 2 million. It is estimated that in another 10 years the child population will be increased by another 17 million. This means that costs of education, the cost of medical care, hospital care, appliances for handicapped children, foster care, and other services for children have soared. These are facts that we have to face, and we can't ignore them. We have to provide much more in the way of funds even to keep the services for children at previous levels.

EDUCATION ACT MUST NOT BE KILLED THROUGH LACK OF FUNDS

The American Parents Committee worked very hard for the passage of the National Defense Education Act. We rejoiced that at last the Federal Government was going to do something to help in educating the brainpower needed for our country's future. Now we are stunned to find that act being virtually sabotaged, not by those who opposed it, but by the administration itself. The life of the bill is only 4 years. How in the world can it accomplish the desired objectives if it can't get off the ground for lack of funds?

The first attempt to shrink and shrivel it came when only a little over half the authorized amount was requested in the 1959 supplemental bill.

We are indebted to the Congress for restoring the fund to the \$75.3 million requested. This amount is still short some \$68 million of the sum authorized for the first year of the act.

Now we come to the request for 1960, the second year of the act. We note that it is for only about two-thirds the amount authorized and we note that the House did not increase the sum beyond the President's request. We learn that colleges are asking twice as much for student loans as the President is willing to request from Congress. (These are loans, as we know, and the money will eventually be returned to the Treasury.) We hear of the great need for more and better trained guidance and counselors, for better teaching of languages and science. Yet the administration is not willing to request the amount that Congress said it wanted to spend to help in these special areas of education.

We note from the published hearings of the House committee that both Secretary Flemming and Commissioner Derthick admitted to the House that they originally asked the Bureau of the Budget for \$225,450,000 to finance the 1960 activities under the National Defense Education Act. Surely if in their judgment that much money is needed, that is what Congress should appropriate. We submit that it is not the prerogative of the Bureau of the Budget to undercut this program, which Congress passed, by withholding funds.

We appeal to this committee to recommend at least \$222 million for this act for 1960.

NEEDS FOR CRIPPLED CHILDREN AND CHILD HEALTH AND WELFARE ARE VERY REAL

The 85th Congress late in its last session recognized the need for increases in the grants-in-aid for children's services and raised the authorizations for the programs for crippled children, maternal and child health, and child welfare by \$5 million each. Yet the request from the administration for fiscal 1960 was for exactly the same amount as was appropriated for 1959. We are happy that the House increased the appropriations for each of these programs by \$1 million and we note in the report that the House committee believes these grants should be higher.

The President and the Budget Bureau apparently do not understand that not all children have happy homes and parents able to take care of their health needs. Services financed by a Federal-State-local partnership are necessary. The infant mortality rate that was brought down so drastically by the maternal and child health program is on the rise again. There is need for care of mothers with complications of pregnancy. There is need to provide and stimulate wider polio immunizations among preschool children, because apparently 50 percent of the cases in last year's outbreak were in this group. There is great need for developing better community efforts for the health of school-age children through multipurpose clinics which will provide care for the conditions discovered in school health examinations.

There is need for increased funds to help in discovering and treating defects of speech and hearing, and in the discovering, diagnosing, and advising about the care of the mentally retarded.

We are far from meeting the needs of other kinds of handicapped children, those with heart defects, epilepsy, cerebral palsy, and those who have lost arms and legs. Too often when a community does do something for children so handicapped, it deals only with the one most conspicuous handicap. Communities should be encouraged to look at the needs of the whole child through multipurpose clinics. With increases in grant-in-aid appropriations, the Children's Bureau could persuade States to set up such multipurpose clinics.

The needs of the homeless, neglected, and troubled child seem to have increased even faster than health needs. Over half a million children have to care for themselves while mothers work. There is great need for homemakers to take over the care of children when a mother is hospitalized or dies. We hope this committee will appropriate \$21 million for maternal and child health, \$20 million for crippled children, and \$17 million for child welfare services.

NEED FOR REAL COLLABORATION ON PROBLEMS OF JUVENILE DELINQUENCY

The last matter we would like to call to your attention is the problem of juvenile delinquency and the need for a coordinated attack on it by the several agencies in the Department concerned with the health, education, and welfare of

children. The House committee on page 19 of its report asked the National Institute of Mental Health to use some of the \$8 million increase granted to it for a study of what should be done about the problem. It asks the Institute to take the primary responsibility in the field. The report goes on to assume that the Children's Bureau can participate under its existing authority. The House action is based on a misapprehension that the Children's Bureau has similar authority to collaborate and finance studies.

We are pleased to see the increase given to NIMH for this purpose and we heartily support the House action. However, we believe the task of making concrete proposals to the next Congress should be a joint responsibility of the Children's Bureau, the Office of Education, and the National Institutes of Health. Of these three agencies, it is the Children's Bureau which has no authority to make grants or contracts for research and study, and has no staff with which to collaborate with the other agencies.

The American Parents Committee shall redouble its efforts to secure the passage of the Juvenile Control Projects Act, coauthored by you, Mr. Chairman, along with Senator Clark and Representative Carl Elliott. This bill would give the Children's Bureau the authority it needs to help finance the research for some of the answers to the juvenile delinquency problem. In the meantime, we urge this committee to appropriate funds for additional staff for the Children's Bureau in order that it may carry out its share of the collaboration called for by the House.

The testimony of the Children's Bureau before you last week revealed that they had asked the Bureau of the Budget for 36 additional positions and were granted only 9. There has been no increase in the Children's Bureau research staff for a long time. The House is correct, we believe, in its statement that a collaborative effort by the agencies oriented in the various sciences could lead to methods for helping reduce the social burden of juvenile delinquency. However, if the effort is to be truly collaborative, we believe the Office of Education must also be included, and we believe the Children's Bureau must be given the funds and the authority to do its part of the job.

SPECIFIC BUDGET NEEDS

Mrs. STOUGH. The three things I would like to discuss are the three needs we seek specifically in the budget. That is, No. 1, the full appropriation for the National Defense Education Act; No. 2, more increase in the grant-in-aid programs under the Children's Bureau, which, as you know, the authorization was raised to the ceiling last year; and No. 3, I would like to discuss a little bit about the juvenile delinquency situation in relation to what the House did in its report and on the use of its increase to the NIMH, if I may.

Senator HILL. All right, Mrs. Stough, you may proceed.

Mrs. STOUGH. I will pass over the paragraphs that some of the doctors covered this morning, which is so obvious to us, that in this whole talk of balancing the budget we try to remember what is our important resource. We feel that children certainly should be counted in that category.

Now a little bit about the National Defense Education Act: I think you, Senator Hill, know how hard we worked for that National Defense Education Act last year.

Senator HILL. You certainly did give it wonderful support.

Mrs. STOUGH. And we just feel very sad when you think of it as being only a 4-year bill for the lack of funds, that the thing may not get off the ground.

You know what happened to the supplemental?

Senator HILL. Yes.

NEED FOR FULL AUTHORIZATION

Mrs. STOUGH. Now we find that the administration or the Department was not allowed to ask for the full authorization for 1960 and in fact they asked for only two-thirds of the amount authorized and you notice that is just what the House allowed.

Now we feel that unless there are some very special reasons that we do not know about, and certainly I do not think they were brought out in the House hearings, that I could notice, unless there are some very special reasons that act ought to have the full authorization and we would like very much to plead for that.

I think I will not say much more about the three grants-in-aid because I think the situation is very familiar to this committee and I notice the doctors representing the Territory offices made a plea for increases in those three grants for which the authorizations were increased last year by law.

Mr. Waxter brought out the need for more child welfare funds. The simple matter is, with the increase in the number of children, we have to keep these programs going dollarwise or we are losing ground because we simply are not able to maintain that level of service that we previously maintained just because there are so many more children to serve and because the costs are going up, too.

COLLABORATION ON JUVENILE DELINQUENCY

The last thing I would like to discuss in a little more detail begins on page 5 of my testimony, and that is the need for a very real collaboration on these problems of juvenile delinquency.

The House committee on page 19 of its report mentions the fact they have raised the appropriations for the National Institute of Mental Health by \$8 million and then they say in their directive that they ask the National Institute of Mental Health to use all or as much of that \$8 million as they need for a study of what should be done about the problem of juvenile delinquency and give the Institute the primary responsibility in that field.

The report goes on to say, and there are several paragraphs that I will not quote, that the Children's Bureau can participate under this existing authority.

With all due respect to the House action, it is really based on the misapprehension that the Children's Bureau has that authority to collaborate in the studies, which it does not have.

We are very pleased to see this increase to NIMH and also pleased to note the wonderful project they are doing in juvenile delinquency, but we believe that the task of making complete proposals to the next Congress should be a joint responsibility carried out by all the agencies within the Department who have an interest in this field, and the three that we think are obvious are the Children's Bureau, Office of Education, and the National Institute of Mental Health.

Now of these three agencies, the Children's Bureau is the only one that does not have authority to make grants for studies in research and has no staff with which to collaborate with the other agencies.

We are, as you know, very much behind the passage of the Juvenile Control Project Act cosponsored by you, Mr. Chairman, along with Senator Clark and Representative Carl Elliott, and we are going to do everything we can to help you pass that bill because in it the

Children's Bureau will be given the authority to do their part in this job and also some extra financing.

But, in the meantime, we would like to urge this committee to provide for additional staff for the Children's Bureau so that it may begin to carry out its part of the directorate that the House has given to both it and the National Institute of Mental Health.

The testimony that the Bureau gave before your committee last week when it testified realizes that the Department has asked the Bureau of the Budget for 36 additional positions in the Children's Bureau and granted only 9. And you remember yourself, Senator Hill, that the research staff of that Children's Bureau had not been raised for a long, long, long time.

We believe that the House is correct in asking in its statement that there be a collaborative effort by the agencies oriented in the various sciences to come up with a study and report to the next Congress on ways to help reduce the social burden of juvenile delinquency.

However, if the effort is to be truly collaborative, we believe the Office of Education must also be included, but they have, I believe, the authority for cooperative research.

They also have some money. Now whether they need more I do not know, but they do have a staff with which to collaborate. We believe the Children's Bureau must be given funds and authority to do its part of the job, through your bill, so those three things are the things I want emphasized:

NATIONAL DEFENSE EDUCATION ACT

First, a look at the money need for the National Defense Education Act;

Second, the three grants-in-aid for the Children's Bureau; and

Third, a clear thinking through of the collaborative effort needed on the whole front of juvenile delinquency.

Senator HILL. I have always said you were most helpful and you certainly have been most helpful today. You brought to us a splendid statement and we deeply appreciate it.

Tell Mr. Hecht we are sorry he was not able to be with us today. We realize he had such short notice, but you certainly ably represented him today.

Mrs. STOUGH. Thank you very much, Mr. Chairman.

STATEMENT

Senator HILL. Mr. Arthur W. Wilkie, chairman, National Child Welfare Commission, the American Legion, has requested that his statement in support of increased funds for the Children's Bureau be included in the record. Mr. Wilkie's statement will appear at this point.

(The statement referred to follows:)

Mr. Chairman and members of the subcommittee, the American Legion has conducted a nationwide child welfare program for 34 years. Our program is maintained and carried forward through the nearly 17,000 posts of the American Legion and 14,000 units of the American Legion Auxiliary by a vast number of devoted volunteer child welfare workers. The child welfare objectives of our national organization are established by these volunteers and we believe this gives us a reasonably accurate grassroots indication of the needs of chil-

dren throughout the country. Our child welfare activities are concerned with all facets of childlife.

We have testified before congressional committees on numerous occasions on social security matters relating to services for children since we believe this act is probably one of the most important provisions for insuring proper growth and development for all children. Our interest at this time is confined to increasing the annual appropriation for the programs of maternal and child health, crippled children's services, and child welfare services to the maximum amount presently authorized by the Social Security Act.

The need for increased funds for these programs was well established this past year; however, we believe a brief review of some of the vital facts indicative of the need for increased funds for these programs would be in order.

Our child population, increasing at the rate of 1 million a year combined with a continuing increase in the cost of medical care, has prevented many States from offering services for a number of crippling conditions among children even though new treatment techniques have been developed. Many handicapped children who have benefited from medical services under State crippled children's programs still need rehabilitation.

It is a sad commentary that in the richest Nation in the world, less than 8 percent¹ of 300,000 children afflicted with cerebral palsy receive treatment through local or State programs. An estimated 675,000¹ children are reported to be suffering with rheumatic fever and only 1.4 percent are under official programs. Approximately 295,000¹ are reported to be affected with epilepsy and less than 1 percent are being assisted through crippled children's services. Similar situations on other phases of crippled children's services could be cited. These few are sufficient to indicate a need for an increase in funds.

Child welfare services provided by either public or voluntary agencies are designed to assure care and protection to children and prevent many of the social ills which befall children. According to statistics of the U.S. Children's Bureau, at least 7 out of every 1,000 children are receiving such services, with the majority serviced by public agencies.

Statistics provided by the U.S. Children's Bureau from 40 States show that child welfare services in public agencies have increased 18 percent between 1946 and 1956 while our child population during this same period increased by 32 percent. From the standpoint of equity, public child welfare services should be available to all children everywhere, but according to the latest information available to us (1956) 49 percent of the counties in the United States, Puerto Rico, and the Virgin Islands, have no full-time public child welfare workers.

If one considers only the increased cost of medical and social services provided children by these three programs, it seems obvious that less children can be served than previously on the present appropriation. However, we believe the demonstrated increase in the number of children in this country in the past few years, calls for more than just a cost-of-living increase in funds. There is a definite need to expand such services if the original intent of the Congress in establishing these programs is to be fulfilled.

The amount of Federal funds made available for these three vital programs is quite small when considered in relation to the Federal budget but is of the utmost importance to children.

The American Legion testified before both the House Ways and Means Committee and the Senate Finance Committee in connection with the 1958 amendments to the Social Security Act. At that time we supported an increase in the statutory authorization of funds for these three vital children's programs and we are grateful that Congress recognized the need and increased the maximum statutory authorization by \$5 million each. However, the increase in authorizations without a subsequent appropriation of funds is obviously no solution to the problem previously recognized.

We pointed this fact out, this session, to the appropriate subcommittee of the House and urged them to increase the appropriation for each of these activities to the statutory maximum. As passed by the House, the appropriation for each of these three programs was increased \$1 million. Naturally, we are pleased by this action but still we are firmly convinced that this increase is insufficient.

Because of our firm convictions, Mr. Chairman, we sincerely urge you and every member of this subcommittee to give serious consideration to our recom-

¹ Source—U.S. Children's Bureau's Statistics.

mendation that the appropriation for each of these three programs be raised to the maximum statutory authorization, i.e., \$17 million for child welfare services; \$21,500,000 for maternal and child health; and \$20 million for crippled children's services. We respectfully submit that there are no more worthier programs and perhaps, in the long run, there are none more vital to the future well-being of this Nation.

In closing, I wish to thank the committee on behalf of the American Legion for the opportunity of presenting our views on this most important matter.

NATIONAL ASSOCIATION OF SOCIAL WORKERS

STATEMENT OF RUDOLPH T. DANSTEDT, DIRECTOR OF THE WASHINGTON BRANCH OFFICE

PREPARED STATEMENT

Senator HILL. Next we will have Mr. Danstedt, National Association of Social Workers.

Mr. DANSTEDT. I am Rudolph T. Danstedt, director of the Washington branch office of the National Association of Social Workers.

Mr. Chairman, I have a full statement which I would like to file.

Senator HILL. All right, we will have it appear in full in the record and you may make such statements as you wish at this time.

(The statement referred to follows:)

Mr. Chairman and members of the committee, I am Rudolph T. Danstedt, director of the Washington branch office of the National Association of Social Workers. I welcome again this opportunity to support and urge certain requests of the Department of Health, Education, and Welfare for essential welfare and health activities.

NEED FOR FUNDS FOR COOPERATIVE RESEARCH AND TRAINING

As this committee knows, the Department of Health, Education, and Welfare requested for 1960, \$1,785,000 for cooperative research in social security and welfare and for the training of public welfare employees. Unfortunately, this request was denied by the House for reasons unstated.

Our association holds that a complete and defensible case could be made for appropriating the full authorizations allowed in 1956 of \$5 million for cooperative research and \$5 million for training. We feel, therefore, that the request of the administration of \$1,785,000, which is only one-sixth of the amount of the funds authorized, is essential. We have been pleased to note that the Secretary of Health, Education, and Welfare and the Commissioner of Social Security have underlined the essentiality of appropriations for cooperative research and training.

This \$1,785,000 represents five one-hundredths of 1 percent of the \$3 billion that is being spent annually for public assistance by the Federal Government, the States, and the localities.

There is an obligation upon government—which spends so many billions of dollars for public assistance—to ascertain, with the aid of qualified agencies and universities, how our public assistance program can fulfill its humanitarian purpose more effectively for these millions of dependent individuals.

Research needs to be conducted also on ways and means for reducing administrative costs in public assistance through the study and examination of procedures that will provide assistance and services as efficiently as possible without, however, any violation of human dignity.

Fortunately, the costs of public assistance are beginning to level off as the old-age and survivors and disability insurance program has increasing impact. This is, therefore, both the time and occasion to develop methods for more significant help to the lowest income group in the country—the sick aged, the disabled and handicapped, and the children who are not protected by survivors benefits. The investment of \$700,000 for cooperative research could be one of the wisest appropriations Congress will make.

An appropriate and necessary parallel program to cooperate research is one for training of the employees of public welfare agencies who are called upon to administer grants and services to that section of our population with the highest complex of problems—social, economic, and psychological.

Whether in teaching the young or serving the sick, there is no substitute for qualified personnel in the area of services to people. For a variety of reasons, including, of course, salary levels, recruitment of public welfare personnel is confined largely to the residents of a particular State. Many of these public welfare staff members, who have had no professional preparation for their arduous and important jobs, have a strong desire to be more helpful to the people they serve and wish to prepare themselves, through inservice training and graduate training, to fulfill that desire. The \$1 million requested would make it possible for something in the order of 350 of these individuals throughout the country to secure some degree of training, ranging all the way to full graduate training in a school of social work. There are about 29,000 caseworkers handling grants to the needy. Only 20 percent of these have had graduate training. There may well be at least 1,000 individuals who are prepared now to take advantage of proposals for further preparation of themselves to perform their jobs more significantly.

It must be recognized that until more skilled professional personnel are made available for the administration of grants and services in our public-welfare program the public assistance roles will continue in many parts of the country to be analogous to a community equivalent to the back wards of our mental institutions. The mental health field has gradually demonstrated that one of the key factors in preventing a chronic and nonreversible condition is sufficient and well qualified personnel. The mental health field has made progress in this area, and the action of the House Appropriations Committee urging still further funds for the training of personnel for mental health assures still further progress. People on the back wards of the public assistance rolls have got to be helped, and this takes dedicated and qualified personnel.

CHILD WELFARE SERVICES

The House increased appropriations for child welfare services from the \$12 million allowed in 1959 and requested by the administration for 1960 to \$13 million. This represents a helpful step forward. We propose that appropriations for child welfare be increased to \$15 million in order to more adequately provide for the demands that are arising in services to children because the Congress last year eliminated the restrictions of the use of these funds for children living in urban areas.

We believe it is only fair and equitable that children who live in urban areas, who constitute a very high proportion of all children in need of foster home and protective services, should increasingly have the advantage of Federal leadership and funds that has long been so effectively made available to children living in rural areas and areas of special needs. We hope, therefore, that his committee will appropriate \$15 million for child welfare services.

TRAINING GRANTS FOR MENTAL HEALTH

We were pleased to note that the House allowed an additional \$8 million for the National Institute of Mental Health. We ask that the appropriation for the National Institute of Mental Health be increased by at least \$10 million over the administration request in order to insure, particularly, that the training grant operations phase of this Institute shall be sufficient to provide for increased costs in salaries and stipends as well as to continue the enlargement of the training program for clinical as well as nonclinical personnel. We place particular emphasis on extension of this program to nonclinical personnel because this constitutes individuals who operate in community settings which enables them to reach individuals in early stages of mental illness—individuals who are uniquely susceptible to help.

CONCLUSION

One characteristic marks our testimony today and that is our concern for preventative services and programs. We hold that provision of funds for cooperative research in welfare and social security and training of public welfare employees constitutes a significant step in the development of preventative and rehabilitative activities. The stimulation of further services and more adequate

services for children is by definition preventative, and the enabling of the better preparation of persons in the field of mental health services is a basic contribution to prevention of a disability that hospitalizes more people than any other single disease category.

We appreciate very much this opportunity to appear before this committee and hope that these truly modest yet important proposals we have made will have your favorable consideration.

FUNDS FOR NATIONAL INSTITUTE OF MENTAL HEALTH

MR. DANSTEDT. Thank you very much, Mr. Chairman.

Now I want to talk very briefly on three points: First, cooperative research and training; second, welfare funds; and third, one that has to do in part with the funds of the National Institute of Mental Health.

On the first one I do not have to say, I think, an awful lot beyond strongly endorsing the very able statement that the Secretary of the Department made on that, the statement that the Commissioner of Social Security made on that, which I happened to hear, and then also the very forceful statement made this morning by Judge Waxter.

I do have this observation. I know we run into difficulties in terms of getting these funds; first, in terms of the Department of the Budget; and secondly, in terms of the Congress.

Under "Research," I have this observation. It is frequently said, "Why cannot the public welfare departments conduct some of this research itself and charge it against administrative costs?"

I think the answer to that is not very complicated. These are operating agencies, and I do not think operating agencies are too effective when it comes to significant research.

I think it is important that this whole area of ADC and aid to the blind and other programs in the field of assistance should be able to turn to the universities and qualified research agencies and if this amount of money is not made available, that kind of research is not going to be done.

TRAINING

With respect to training, I know again it is often said, and I can understand some puzzlement with respect to this, "Why do not public welfare agencies step into this field and use 50 percent matching funds under administrative costs?"

I think they should to some degree. I think one of the reasons they do not do it is partly because of the fact that their resources are limited. Most of them do not have enough staff to do an adequate job.

I think, and this is not said in any derogation, but with a degree of envy they look across at the public health, mental health, vocational rehabilitation fields, and they see, we will say, the extent to which training funds are made available in those areas, and the people in public welfare feel quite rightly and correctly if it is impossible for them to get the same sort of funds for leadership in that area as you find certainly in these other fields.

I might close this part of my comment by indicating that what the Department is asking for, \$1,785,000, for cooperative research and training, constitutes, if my mathematics are correct, something like five one-hundredths of 1 percent of the \$3 billion that are being spent by the Federal Government in the States and localities for this pro-

gram, and it is a pretty small amount, but it is important to get started. It has been long delayed.

CHILD WELFARE

With respect to child welfare, the only observation I have to make here is that many of us hope that this Senate will choose to increase the amount to \$15 million.

You know the House brought it up from \$12 million to \$13 million. We think the strongest argument there is the amendment to the Social Security Act last year which made these child welfare funds available to children in urban areas. We think the children in urban areas ought to have the benefit of the same kind of leadership and funds that children in rural areas and areas of special need have had for a long time.

Finally, in the mental health area, we would like to suggest that maybe the Senate would like to consider increasing the funds for the National Institute of Mental Health, roughly \$10 million, which is what the Department asked for, in contrast with the increase of \$8 million, which is provided for by the House.

There we think that a strong case could be argued about increasing the training grants aspect of the National Institute of Mental Health. We think it is important that there be more opportunities made available for the training of clinical personnel and also nonclinical personnel.

EXTENSION TO NONCLINICAL PERSONNEL

We would like to lay a little stress on the extension of this program to nonclinical personnel because this constitutes individuals who operate in community settings which enable them to reach individuals in the early stages of mental illness and, as you well know, the earlier that mental disturbance can be discovered, the better are the chances of some kind of cure.

Now, that is about all I have to say except to finally summarize. The stress I have outlined, I think, has been along preventative program lines. Let us try to do something in terms of research and training, which constitutes a significant step in the development of preventative and rehabilitative activities.

The stimulation of further services and more adequate services for children is by definition preventative and additional training of persons in the field of mental health services by the addition of funds, I think, is certainly an important contribution to the prevention of a disability that hospitalizes more people than any other single disease category.

Thank you very much for this opportunity.

Senator HILL. Thank you, Mr. Danstedt. You have made a very impressive statement, and we certainly appreciate it.

Thank you very, very much.

COMMUNICATION

Senator HILL. Mr. M. R. Barnett, executive director of the American Foundation for the Blind, Inc., New York, has addressed a letter to me in support of the request for \$1,785,000 for grants to States for social security training and studies. Mr. Barnett's letter will appear at this point in the record.

(The letter referred to follows:)

AMERICAN FOUNDATION FOR THE BLIND, INC.,
New York, N.Y., May 18, 1959.

HON. LISTER HILL,
Chairman, Subcommittee on Labor and HEW,
Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR SENATOR HILL: On behalf of the American Foundation for the Blind, I should like to respectfully urge your subcommittee to restore the budget request of \$1,785,000 for grants to the States for Social Security Administration training and studies, which was disallowed by the House Committee on Appropriations and omitted from H.R. 6769 when it was passed by the House of Representatives on April 30, 1959.

We sincerely believe that further delay in activating these essential research and training programs, which were authorized by the Congress in 1956, would be harmful in terms of monetary as well as human values. The interest of the American Foundation for the Blind stems from the fact that 40 to 50 percent of all blind persons in the United States are dependent upon public assistance. In fiscal 1958, the cost of the aid-to-the-blind public assistance program to Federal, State, and local governments totaled \$92,549,600. The Federal Government's contribution to the States for the administrative costs of this program was \$3,241,500 during that year.

The experience of our staff has provided us with impressive evidence of the necessity for funds for research and training of personnel in this area. The concern of your subcommittee for the needs and welfare of people has been so fully demonstrated that we felt it incumbent upon us to share our experience with you.

Over the last several years, the American Foundation for the Blind has made surveys and studies in various parts of the United States on the characteristics of blind persons and on the services available to them. Our surveys reveal that at least 10 times as many blind people are removed from the public assistance rolls by death as are removed owing to the achievement of economic independence. One study of a State has shown that 29 percent of the blind persons receiving public assistance had been on the rolls for 20 years or more. In an entire State, less than one-half of 1 percent of the aid-to-the-blind cases were closed during 1 year as a result of employment or increased earnings of the recipients.

It is the firm conviction of the American Foundation for the Blind that this situation can be substantially improved through the dual approach of research and traineeships, which may be likened to the use of a microscope and of a telescope.

In the mental health field, this dual approach has proved to be effective. The research or microscopic approach has been used to discover new and improved methods of treatment; and the farseeing telescopic approach has been used in the provision of more and better trained personnel. The result is well known. In some localities, the tide has turned; and the race to construct new buildings to keep up with an ever-growing population has given way to declining mental hospital occupancy. There are improved services—and additional hope, therefore—for those remaining in or being newly admitted to mental hospital care.

The facts are clear. Humanitarian as well as economic considerations can best be served by changing the present emphasis in public assistance from that of custodial care to that of treatment. The research and traineeship programs give promise of resulting in this change of emphasis. We earnestly hope, therefore, that your subcommittee will restore this item to the appropriation for the Social Security Administration.

Sincerely yours,

M. R. BARNETT, *Executive Director.*

STATEMENT

Senator HILL. Mrs. Fred L. Bull of the National Congress of Parents and Teachers has requested that her statement in support of various items in the Department of Health, Education, and Welfare portion of the bill be included in the record. Mrs. Bull's statement will appear at this point.

(The statement referred to follows:)

STATEMENT OF MRS. FRED L. BULL, CHAIRMAN OF LEGISLATION, NATIONAL
CONGRESS OF PARENTS AND TEACHERS

It is always a pleasure and a privilege to appear before this committee to put on record my organization's support of programs which are sound and prudent investments in human resources.

The National Congress of Parents and Teachers is a voluntary organization with a membership of more than 11 million. It is made up of men and women who are trying to rear their own children as well as they can and who are also trying to create in their communities the conditions under which all children will flourish. They are taxpayers in each of the 50 States, and they know that they must balance their own budgets in order to pay their taxes. Our members have learned that economy, in the best sense of the word, means the most productive use of money, and that the investment in and development of human resources pay high dividends.

In the budget before you there are four specific programs for which we should like to speak.

APPROPRIATIONS FOR THE NATIONAL DEFENSE EDUCATION ACT

Members of Congress from both sides of the aisle worked together to enact the National Defense Education Act. This bill is an expression of the Congress wish to strengthen and enrich our school system in a time of urgent need. It has proved even more popular than its supporters anticipated. Applications under all the programs have exceeded the estimates by 100 percent.

The Congress expects the jobs to be done in 4 years. But if inadequate appropriations curtail the act's effectiveness in any single year, to that extent the intent of the Congress in passing the act is not met. We urge, Mr. Chairman, the appropriation of an amount sufficient to insure the fullest nationwide benefits from a program whose enactment by the Congress has impressed the whole country.

APPROPRIATIONS FOR THE LIBRARY SERVICES ACT

We urge your support of another short-term program for which time is running out—the Library Services Act. To date, States report tremendous stimulus to the development and improvement of library service. Largely because of the interest aroused and the needs shown by the State plans for the use of the grants, State legislatures have increased State appropriations. Most of the States have sufficient funds available to match the allotments under the full \$7,500,000.

They have used the funds to buy books, to add professional librarians to extension agency staffs, to provide library training. They are organizing county and two-county libraries, to cut cataloging and processing costs by consolidation. They have bought bookmobiles, to get books out into the country, to the people. And they constantly report significant increases in the circulation of books and in requests for more books.

This program is a clear example of the Federal Government helping people to help themselves. But only 2 years remain under the present act, and there are still approximately 25 million rural Americans without adequate library service. We urge, Mr. Chairman, the full appropriation of \$7,500,000 for the Library Services Act.

GRANTS TO THE STATES FOR MATERNAL AND CHILD HEALTH AND WELFARE

Last summer the Congress recognized the need for expanding the three grant programs to improve health and welfare services for mothers and children. To quote H. Rept. 2288, 85th Congress:

"With respect to the maternal and child health program, many well-baby clinics are overcrowded, only a beginning has been made in providing adequate health services for mentally retarded children, and there is a need for expansion of services in rural areas where resources are still inadequate for promoting the health of mothers and children.

"In the crippled children's program, urgent need exists for expanding programs for surgical treatment of children with congenital heart lesions to pre-

vent the needless loss of life among children with this condition. Services for children with speech and hearing disorders are grossly inadequate; only one child in four of the speech-handicapped children is receiving necessary diagnostic or remedial assistance. Many other children with orthopedic and other types of handicap are also helped through this program.

"Great need exists in the child welfare program for expanding provisions for foster care so as to afford better care and protection for children who must be cared for away from their own homes and families. Only half of the counties in the country have the service of a public child welfare worker in the face of nationwide increase in juvenile delinquency and increased neglect and abuse of children."

We believe that the way these programs have developed proves their soundness. In the last 22 years all States have developed programs of child health and child welfare services which have been steadily extended to be available to children wherever they live. They have been helpful, through emphasis on staff training activities, in improving the standards and quality of services to children. They have helped to equalize among the States the financial burden of providing health and welfare services.

We believe clear evidence of their value to the States is shown by the strong State and local financial support. For example, in 1940, 52 percent of the funds for maternal and child health services came from State and local funds. In 1958, 76 percent came from State and local funds and 24 percent from Federal funds.

For crippled children's services, total planned expenditures in 1940 were \$9.3 million, of which \$5.6 million, or 60 percent, came from State and local funds. By 1958 the total amount had increased to \$54 million, of which \$39 million, or 72 percent, came from State and local funds, and \$15 million, or 28 percent, from Federal funds.

The picture is similar for child welfare services. In 1940, State and local public welfare agencies spent an estimated \$45 million for these services, including \$35 million for the support of children in foster care. Of this total, \$1.5 million was from Federal funds. In 1957 an estimated \$159 million was spent for child welfare, including \$113 million for foster care, almost all of which came from State and local funds. The remaining \$46 million was spent for personnel, training, and administration, of which \$38.7 million, or 84 percent, came from State and local funds and \$7.3 million, or 16 percent, from Federal funds.

In spite of these efforts, today the States report needs which they cannot meet. We believe that they could use for the direct benefit of children the full amount authorized for these programs. In answer to a questionnaire by the American Public Health Association, 27 States reported that they need \$2,750,000 for additional maternal and child health services for the coming year. Six hundred thousand dollars of this was to provide new or expanded services for children with mental retardation. Nearly \$270,000 was for premature babies. Funds would be used for more well-baby clinics, to provide more prenatal care, and for more polio immunization. We can remember regretfully that 50 percent of the cases of paralytic polio last year occurred in children under 5.

In the same questionnaire, 28 States report a need for \$3,500,000 in additional funds for crippled children's services. Of this almost \$1 million was requested for cardiac patients by 10 States.

Our organization supported the legislation raising the authorization for these three grants because we believe with the Congress that:

"The unprecedented increase in the child population, the rising costs of care and services, the development of new techniques and measures for helping children, and the great inequality of the basic child health and child welfare services are factors which combine to produce an urgent need for increased Federal funds for all three of these programs."

We urge, Mr. Chairman, the full amount authorized:

Maternal and child health	\$21, 500, 000
Crippled children services	20, 000, 000
Child welfare services	17, 000, 000

WHITE HOUSE CONFERENCE ON CHILDREN AND YOUTH

Parent-teacher associations throughout the country are preparing for the 1960 White House Conference on Children and Youth. Our people are increasingly concerned by the mounting difficulties of education, of coping with juvenile delinquency. This conference provides an opportunity for people from every

part of our society and for the representatives of the young people themselves to come together to diagnose their difficulties and to develop action programs which they can then take back to their own communities. We understand that \$1 million to finance the conference will come from non-Federal funds. We urge your support of the request for \$200,000 to provide conference staff, because we believe that this is a conference designed to help people help themselves in one of the most significant undertakings in which they can engage.

UNITED ELECTRICAL, RADIO, AND MACHINE WORKERS OF AMERICA

STATEMENT OF RUSS NIXON, WASHINGTON REPRESENTATIVE

PREPARED STATEMENT

Senator HILL. You may proceed, Mr. Nixon.

Mr. NIXON. I have a prepared statement which I would like to have put in the record and then extemporaneously summarize it.

Senator HILL. All right, we will put your statement in the record in full.

(The statement referred to follows:)

REISSUANCE BY THE BUREAU OF LABOR STATISTICS OF THE "CITY WORKER'S FAMILY BUDGET"

The purpose of this statement, on behalf of the 150,000 workers in the United Electrical, Radio, and Machine Workers of America (UE), is simply to urge the appropriations subcommittee on the Department of Labor to give strong support to the reissuance by the Bureau of Labor Statistics of its "City Worker's Family Budget."

This extremely valuable budget estimate was originally developed at the direction of the House subcommittee in 1945 and first issued for 1947. It was reissued for 1949, 1950, and 1951. Since then, it has been dropped.

The report of the House appropriations subcommittee in 1958 stated, "The committee was impressed with testimony it received concerning the need for repricing the 'City Worker's Family Budget.' This appears to the committee to be of sufficient importance that it should be accomplished with the funds recommended in the bill." (p. 9)

Nonetheless, the "City Worker's Budget" has not yet been reissued, although it is understood that progress toward its preparation, together with a "Budget for Elderly Couples," has been made in the past year. In unfortunate and inexplicable termination of this statistical research in 1951 and the failure up to the present time to issue the budget anew, it is urgent that this subcommittee state in clear terms its insistence that the Department of Labor, Bureau of Labor Statistics, make available as soon as possible its estimated "City Worker's Family Budget."

The House subcommittee based its original 1945 direction to Bureau of Labor Statistics for the preparation of this budget on the need to find out what it costs a worker's family to live in the large cities of the United States. That this is crucial information of central importance to any rational system of knowledge and understanding about our economy and its working people should be starkly obvious. One wonders why it took so long for the Department to undertake this study in the first place, and it is shocking that, once started, this research should have been stopped. We have vast mountains of detailed statistics and facts about all sorts of things, we know intimately the family life of pigs, cows, fish, and horses, but we have been niggardly regarding the facts of living for the worker and his family. The "City Worker's Family Budget" would help to correct this lack.

It should be emphasized that this budget is of great use and value to large and varied groups. As will be outlined below, the budget estimate will be an invaluable aid to many branches of the administration and of Congress in consideration of numerous public policies. Professional economists and statisticians will find this information of considerable and growing importance as they address themselves to many economic problems. Employers have made wide use of the "City Worker's Family Budget," various business services have reproduced these data for their business clients, and the Bureau of Labor Sta-

tistics reports that most inquiries they received for this information comes from employers. Labor unions are united in placing great emphasis on the need for the "City Worker's Family Budget." Indicative of this, and backing this particular statement by the UE, is the following resolution adopted by the 1957 convention of the United Electrical, Radio, and Machine Workers of America (UE), in San Francisco:

"Winning a decent living wage on an annual basis must be a basic objective for organized labor. Hourly and weekly wage levels must be related to the absolute need of each worker for sufficient annual income. The minimum adequate annual wage must be won for the lowest rated wage earner, on the basis of a single wage earner for each family, and for standard hours of labor if it is to be a stable income foundation for all working people.

"Definition and description of such a minimum decent level of living budget is both practical and essential for collective bargaining and national policy. Legislatively such a budget definition is needed to help determine the level of minimum wage legislation, social security benefits and tax exemptions.

"The Heller Committee for Research in Social Economics of the University of California has made an outstanding contribution in this respect through their annual wage earner budget. The Heller budget for San Francisco wage earners in 1956 approximated \$5,600 for home renters and \$5,900 for homeowners.

"From 1947 until 1951 the Bureau of Labor Statistics of the U.S. Department of Labor published a 'City Worker's Budget' for a standard defined as a modest but adequate American standard of living. Although only a very small cost was involved, the preparation of this minimum 'City Worker's Budget' was stopped when the Eisenhower big business government took control of the Department of Labor. It has not been reissued since 1951 and there can be no doubt that employer opposition killed the Government's preparation of this budget standard so valuable to labor in its struggle for a decent annual living wage.

"Therefore, this 22d annual UE convention—

"1. Urges the wider use of minimum level of living worker annual budgets to back up the fight for increased annual income for all workers.

"2. Expresses its appreciation for the initiative and effectiveness of the Heller Committee for Research in Social Economics of the University of California for its work in the preparation of a wage earner budget.

"3. Insists that the Federal Government resume annual publication for all leading industrial areas of an adequate American living standard worker's budget, and calls upon the UE International Union to take all feasible steps to this end, including contacts with the Bureau of Labor Statistics, Department of Labor, U.S. Bureau of the Budget, and the Appropriations and Joint Economic Committees of the Congress."

WHAT THE "CITY WORKER'S FAMILY BUDGET" IS

The "City Worker's Family Budget" is an estimate of what it costs an urban family of four,¹ an employed father, housewife, and two schoolchildren under 15 years of age, to live at a level of adequate living—to satisfy prevailing standards of what is necessary for health, efficiency, the nurture of children, and for participation in community activities. It is not a physical subsistence budget, nor is it a model or luxury budget. The Bureau of Labor Statistics has used the words "necessary minimum" to describe the budget, while emphasizing that this means conventional and social as well as biological needs.

It is generally recognized that some arbitrary judgments apply in making such a budget estimate. But with all these problems, the "City Worker's Family Budget" has been the only widely available estimate of what is commonly thought of as the American level of living.

The method of calculating the budget is to arrive at a list of goods and services which comprise the budget and then to price these items in various cities. The list of budget goods and services is based on scientific statistical studies of city family expenditures combined with scientifically calculated data on housing, nutrition, etc. The determination of the level of consumption is based on the actual consumption patterns of city workers, thus making the budget a realistic rather than a fanciful estimate. Careful inspection of the

¹ An adequately reliable and simple method permits estimates of cost of living of families of other sizes.

actual mix of goods and services included in the budget make clear the very modest, and in many respects seriously inadequate, nature of the estimate.

Originally, the budget was priced in 34 cities of the United States, utilizing the regular price survey services that provide the monthly Consumer Price Index.

The "Budget for Elderly Couples" is calculated in similar fashion and has, of course, its very special and growing significance.

THE COST OF ISSUING THE "CITY WORKER'S FAMILY BUDGET"

Although it is difficult, especially for one outside the Government, to calculate the costs of preparation, pricing and issuance of the "City Worker's Budget," it would appear that about \$50,000 a year would cover the expenses for about 34 cities. This is an extremely modest amount for the valuable results gained. It is hard to think of a better statistical bargain for the Federal Government. Especially is this true when one notes that nearly \$34 million was appropriated in 1958 for the principal current statistical programs of the Federal Government. Certainly out of this total expenditure we should be provided at least with knowledge about the living costs of city workers.

It is our understanding that the Bureau of Labor Statistics expects to be able to issue the budget this fall if its current appropriation requests are not reduced. However, based on the past experience with the "City Worker's Budget," it would seem desirable and necessary that this subcommittee should specifically again commission the Department of Labor to reissue the budget to assure its appearance.

USES OF THE "CITY WORKER'S FAMILY BUDGET" AND THE "ELDERLY COUPLE'S BUDGET"

The following brief list of uses of these budgets give an idea of the importance of having these estimates available on a regular and continuing basis.

1. Both legislative and administrative decisions in areas such as housing, medical, educational, and relief grants require budget data for informed application of income standards tests.

2. Consideration of income tax exemption levels need budget information. Actually, in 1947, the U.S. Treasury prepared a major memorandum on the "City Worker's Family Budget" and income tax exemption levels. This rational and humane approach could not be continued on an informed basis either by the Treasury Department or the House Ways and Means and Senate Finance Committees since the budget estimates were stopped in 1951.

3. Establishment of minimum wage levels on both Federal and State bases should be able to take account of worker budget estimates.

4. The "City Worker's Family Budget" provides a measure of the cost of living which is often mistakenly attributed to the Consumer Price Index. The budget provides a basis for comparison of regional differences in living costs and with care, of changes in living costs from year to year.

5. For both labor and management the budget estimates furnish highly significant data for collective bargaining determination of wage rates.

6. To an indefinite but undoubtedly large degree, the "City Worker's Family Budget" estimates can be of great use in the debate over means of achieving economic growth and full employment. Analysis of personal consumption, a major factor in limiting the current recession, is of very great importance and, undoubtedly, could apply family budget estimates in many interesting and fruitful ways.

7. As the capacity of our economy grows, elimination of poverty and achievement of minimum decency levels of living for all the people become very real and tangible goals. For this the landmark of the budget is essential. The "City Worker's Budget" estimates are applicable both to the human considerations involved and to the needs of the economic system.

8. One of the great international economic issues lies in comparative levels of living in various countries. Since 1953 the United Nations, together with UNESCO and the ILO, have carried on a special study of the problem of "International definition and measurement of standards and levels of living." This subject is bound to grow in significance and the "City Worker's Budget" is of great importance in this connection. The budget is needed to permit the United States most effectively to deal with this matter in the UN, UNESCO, and other forums of comparative international economic relations.

9. The "Elderly Couple's Budget" has a special but very major importance in relation to social security, to other aspects of old age pensions and assistance, and to general problems of the aged.

Finally, the American standard of living is a powerful concept both at home and abroad. It is a challenge and a goal based on the welfare of the common people—inevitably the ultimate foundation of any stable successful society. We should boldly define, inspect, and measure our accomplishments by the yardstick of the American standard of living. For this, the "City Worker's Family Budget" is a necessity.

CITY WORKER'S FAMILY BUDGET

Mr. NIXON. First, I want to say I think I certainly appreciate and all the witnesses here today appreciate the gracious patience that you have had in hearing all of us on the detailed aspects of this budget.

I have a very simple purpose here, perhaps not as broad as the next witness, and that is I want to underline the importance of this committee giving support to the reissuance of the "City Worker's Family Budget" by the Bureau of Labor Statistics and the "Elderly Couple's Budget."

I know you, as chairman of the Senate Labor Committee for a long time, have had knowledge of this budget which has been used in all sort of ways.

Senator HILL. Yes, it has been very helpful in many ways.

Mr. NIXON. The shocking thing about it is it lasted until 1951 and then I think in 1952 and 1953 it was terminated so that for the last 7 years you, as a Senator, if you told your administrative assistant you wanted him to call up the Government and find out something about what it costs the average American worker to live, the Government would have to say, "We have no data to give you the answer to your question."

Now this is obviously a shocking and regrettable situation. We have a tremendous amount of information about pigs and cows and chickens and fish, but we do not have some of the elementary information we need about the lives of working people in this country and, as you say, this budget, simply calculated, gives careful basis of estimating what it costs a man and his wife and two children to maintain themselves in some orderly, well-designed standard of living.

This is very greatly needed and was very valuable when we had it.

HOUSE REPORT

Now the report of the House committee this year has restated its support. Let me read just two sentences.

Senator HILL. What page is that on?

Mr. NIXON. This is page 4, sir, of the House report, the next to the last paragraph:

In last year's report, the committee expressed its interest in having the "City Worker's Family Budget" brought to date. The Commissioner advised the committee that this budget and the "Elderly Couple's Budget" should be priced by sometime this fall. The committee wishes to reiterate its interest in the pricing of these two budgets and will expect this be accomplished on schedule.

I think the committee on the House side thought it was wise to put this in because they were not sure that, lacking it, other things might not intervene and the budgets might not be forthcoming.

That is a very concrete way of handling it, Senator Hill. I think what I am asking is that a sentence or two be inserted in the Senate report to back up the House with regard to this particular request.

As I understand, there is no need for any additional appropriation beyond what has been allotted by the House Appropriations Committee, so it is not really a matter of additional money, but it is a matter of an expression of interest on this subject and it just seems to me that it is relevant that the Congress itself initiated this budget. It was at the request of Congress that it was initiated back starting in 1945 and it is certainly appropriate that Congress should restate it and insist that it be made newly available. Its uses are many.

VALUE OF PUBLICATION

It is just inconceivable that you can write income tax exemptions levels without having some of this information, otherwise you are operating in the dark in much of our social education, housing, medical, relief grants, et cetera.

Yet you have to have some idea about what it costs people to live. In dealing with minimum wage levels, obviously you are floundering in the dark if you do not have these elementary data.

It is a cost of living, which, as everybody knows, the consumer price index is not a cost of living. This is a genuine cost of living varying from time to time and also giving a reasonable measure of the cost of living, which is unique.

It is extremely valuable in the labor-management, collective bargaining, and interestingly enough, Senator Hill, I have been told that at the Bureau they have more requests from management for these data than they have from labor.

In other words, this is not just of interest to one or the other side of the labor-management picture.

Senator HILL. I might say in this connection 2 years ago, when we had this, some of the strongest testimony came from management. Management strongly emphasized the need for these figures, these statistics.

Mr. NIXON. Well, there are many other aspects of this, such as the international interest in our American standard of living which justifies definition here at home, and just to mention the fact of having a calculated budget cost of living for an elderly couple suggests the many uses to which that information can be put.

So, in conclusion, I would just want to say that I think this is one of the greatest statistical bargains that the Government can buy. It costs probably around \$50,000 a year. That is probably all that this actually will cost, and to leave ourselves blind in this area just to save that amount of money is inescapable to me.

We spend \$34 million in the three main statistics services to the Government a year, and to lack this elementary information would be unfortunate; so, specifically, Senator Hill, I would like to urge in your report you consider merely adding a sentence or two to back up the House insistence that this City Worker's Family Budget and the Elderly Couples Budget be reissued.

Senator HILL. You are not asking for any additional funds; is that right?

Mr. NIXON. No additional funds are necessary.

Senator HILL. You are just asking us to join the House in the direction that funds that are to be appropriated be used for this purpose?

Mr. NIXON. Yes, I think specific expression to that effect by the Senate Committee will be useful.

Senator HILL. Your testimony is very refreshing.

Mr. NIXON. Thank you very much, sir.

FEDERAL STATISTICS USERS' CONFERENCE

STATEMENT OF JOHN A. BAKER, VICE CHAIRMAN

GENERAL STATEMENT

Senator HILL. Now, Mr. Baker, we appreciate your being here today. You may proceed as you wish.

Mr. BAKER. Mr. Chairman, and members of the committee, my name is John A. Baker. I am a vice chairman of the Federal Statistics Users' Conference.

Members of the conference are business, farm, labor, and non-profit research organizations who use Federal statistics and are interested in their improvement.

I represent the National Farmers' Union in the conference. I am submitting a list of conference members and the names of its officers for the record.

As users of Federal statistics, we have a particular interest in the programs of the Bureau of Labor Statistics. The information on employment, prices, wages, productivity, industrial hazards, and foreign labor conditions which they provide, is widely used.

We have carefully examined the proposed 1960 programs of the BLS as contained in the budget. In general, they appear to be reasonable and worthy of your support. I would, however, like to comment specifically on four significant changes.

THE CONSUMER PRICE INDEX

First, I would like to refer to the two proposals for improving the Consumer Price Index. One, a proposal to improve current pricing will give more accurate information in the immediate future.

The other, a basic revision of the index, will provide a basis for measuring the impact of price changes on consumers in the mid-1960's and thereafter.

It is difficult to overstate the importance of the Consumer Price Index.

It is a basic measure of consumer purchasing power.

It is tied into wage agreements which cover some 4 million workers, and a change of 1 point in the index means a change of \$200 million in the rate of annual wage payments to these workers.

It is used for reviewing and studying possible revisions in pension and benefit plans.

It is the indicator used to measure the impact of inflation on the general public.

In our own case, we in the National Farmers' Union are interested in the Consumer Price Index because of its importance as an indicator of non-farm inflation or deflation. We have a particular interest in the foods and apparel components because of their relationship to the market for agricultural products.

Since the Consumer Price Index has such broad and far-reaching significance, it should be as representative as possible of the actual prices paid by consumers for the goods and services they buy.

The proposed program, by improving current pricing, would make the index a better indicator of the effect of price changes on consumer ability to purchase the goods and services the economy produces.

The Consumer Price Index must also take into account the importance of each item in the consumer's budget if it is to measure accurately the impact of any price change.

The present index is based upon a survey of how city workers spent their money in 1950. It will be entirely unsuitable for measuring price changes in the 1960's unless it is based upon spending patterns of that time.

It is time now to begin work on a revision of the index in order that, 5 years from now, it will measure the effect of price changes on consumer budgets in terms of how people are actually spending their money in the 1960's.

USERS WELCOME CONSOLIDATION OF STATISTICAL RESPONSIBILITIES

I would like to turn for a moment to the proposed consolidation of responsibility for employment and unemployment statistics in the Department of Labor and for estimates of construction activity in the Department of Commerce.

As users of Federal statistics we welcome this change which is reflected in the 1960 Bureau of Labor Statistics program. It will eliminate the confusion arising from the division of responsibilities in the past. It will promote a better understanding of the adequacies and deficiencies of these statistics in the future.

Survey of construction labor requirements will provide information important for many purposes.

SURVEY OF LABOR REQUIREMENTS

The 1960 BLS program includes a proposal to start a continuing survey of labor requirements for various kinds of construction. These data are important because they will tell us about the level of employment which can be expected at given levels of various kinds of construction activity.

They will provide information on the outlook for employment in various kinds of construction and will supply material needed to guide apprenticeship training programs.

They will provide the basis for measuring productivity in construction and for developing a meaningful construction price index. To you in the legislative branch, they will furnish a useful guide to the employment-generating effect of public works programs.

DATA WOULD AID UNDERSTANDING OF BROAD PROBLEMS

The proposals to improve the Consumer Price Index and to begin to survey labor requirements for construction will give us some of the information needed for a better understanding of the broad issues of price stability, productivity, employment, and economic growth.

These are issues which currently are receiving close attention both in Congress and in the executive branch. Business, farm, labor, and economic research groups are also vitally interested in these problems.

Unfortunately, the information on which we all must depend still has many deficiencies. There are still significant gaps in wholesale price, wage, and productivity statistics. It is disappointing to us to find that the 1960 budget does not at least provide for those important parts of the 1959 budget program on which no action was taken. But the BLS program for 1960 will overcome some of the deficiencies. It is a step in the right direction.

I want to add my personal statement to those of the previous witnesses today that I think the Nation should feel very deeply appreciative to you, Mr. Chairman, for your work both in the appropriations field and in the general substantive legislation field with respect to all the different parts of the Federal program covered by health, education, and welfare.

Senator HILL. Thank you, Mr. Baker. It is always a pleasure to work with you and you are always most helpful and most cooperative and you always bring us something that is permanent, something that is constructive, and we certainly appreciate it.

Thank you very much.

STATEMENT

Senator HILL. Mr. Clarence W. Bird, director of the national economic commission, the American Legion, has requested that his statement regarding appropriations to the Department of Labor be included in the record. Mr. Bird's statement will appear at this point.

(The statement referred to follows:)

Mr. Chairman and members of the subcommittee, I want to express my appreciation on behalf of the American Legion for the opportunity of appearing before you to present our views upon certain appropriation requests of the U.S. Department of Labor.

The American Legion at its 1958 national convention adopted resolutions endorsing programs of the Department of Labor which are of direct interest to veterans. Three of these resolutions specifically request that sufficient funds be appropriated: (1) Resolution 138, to insure an adequate employment and counseling program for veterans through the Veterans Employment Service; (2) Resolution 272, to accelerate the older worker employment program without sacrificing the present quality of services; (3) Resolution 431, to insure effective functioning by the Bureau of Veterans Reemployment Rights.

VETERANS EMPLOYMENT SERVICE

Section 2010 of title 38, United States Code, mandates the Secretary of Labor to promulgate and administer policies covering operations in the field of employment to the end that veterans shall receive "The maximum of job opportunities in the field of gainful employment."

The State veterans employment representatives are directed, in cooperation with the staffs of public employment services in the various States to—

"(1) be functionally responsible for the supervision of the registration of veterans of any war in local employment offices for suitable types of employment and for placement of veterans of any war in employment;

"(2) assist in securing and maintaining current information as to the various types of available employment in public works and private industry or business;

"(3) promote the interest of employers in employing veterans of any war ;
 "(4) maintain regular contact with employers and veterans' organizations with a view of keeping employers advised of veterans of any war available for employment and veterans of any war advised of opportunities for employment ; and

"(5) assist in every possible way in improving working conditions and the advancement of employment of veterans of any war."

During the current year we have carefully observed the programs and operations of the Veterans Employment Service and the State employment security agencies. We are appreciative of the continual strong support given to our national employment program by these operating agencies. The American Legion and the Veterans Employment Service views with concern the unemployment picture over the entire Nation.

According to the latest figures available from the Department of Labor and the Department of Commerce, there were over 3 million unemployed workers as of December 31, 1958. Of this total over 900,000 were veterans, about 10 percent of whom were disabled veterans. The foregoing unemployment figures clearly indicate the need for continued efforts in this field of finding jobs for veterans.

State employment security offices over the Nation received during the past fiscal year more than 2 million new veterans' applications, of which 156,200 were from disabled veterans. These offices placed 1,226,880 veterans, including 103,200 disabled veterans.

We of the American Legion feel that the programs carried on in communities throughout the Nation by our posts, in cooperation with the local offices of the State agencies, have materially contributed to this excellent record. However, we are concerned that as of December 31, 1958, there were over 900,000 veterans' application on file with the local offices of the State employment security agencies throughout the country, including 88,085 from disabled veterans.

Resolution No. 138, adopted at our 1958 national convention, urges Congress to appropriate sufficient funds to insure an adequate employment and counseling program for veterans through the Bureau of Employment Security, its U.S. Employment Service, and Veterans Employment Service, and through grants to State employment security agencies, to the end that the provisions of law may be carried out.

The American Legion feels that the operation of the Veterans Employment Service and the State employment security agencies in their mutual programs of special service to veterans during the past years has been successful, and merits our continued support.

An examination of the budget submitted by the U.S. Department of Labor for the fiscal year 1960 reveals that they have requested the sum of \$1,252,000 for the Veterans Employment Service. We note this request is but a slight increase of \$5,600 over the fiscal year 1959. We understand this increase is to cover mandatory items, such as postage rate increases, etc.

The American Legion believes the above sum is adequate to carry on this program during the coming year. Therefore, we respectfully request it be approved.

EMPLOYMENT OF MATURE WORKERS

The American Legion has, for a number of years, devoted considerable time and effort in program planning and development to insure that middle-age and older workers receive a fair opportunity of securing gainful employment in accordance with their abilities and qualifications.

With this goal in mind, Resolution No. 272 was adopted at our 1958 national convention, which reads in part as follows :

"* * * that the Congress be urgently requested to provide supplementary funds as promptly as possible to allow the Department of Labor and its affiliated State employment security agencies to maintain the level of services provided to older workers during the past fiscal year * * * that the American Legion utilize all of its resources to secure additional emphasis through promotional programs, including substantially larger appropriations for this purpose * * *."

During the past several years considerable progress has been made by the Labor Department's Bureau of Employment Security Agencies in connection with the "older worker" programs. Experience has proven that specialized intensive interviewing, testing, counseling, and job development has resulted in placing in gainful employment several times the number of older workers than before the utilization of this special service.

Naturally, the American Legion is vitally interested in the success of the efforts exerted by the Department of Labor, since veterans of World Wars I and II comprise a sizable segment of the older worker group.

A recent report shows that as of October 31, 1958, there were over 22 million living veterans. The average age of World War I veterans is 64, while that of the World War II group is 40.

Statistics supplied by the Bureau of Employment Security, after its older worker study was conducted in 1956, indicated that a large number of job openings had upper age limits of 35 or less; over 41 percent of the job openings barred jobseekers age 45 and over; and more than 50 percent had limits under age 55.

Veterans comprise more than one-fifth of jobseekers age 45 and over, and this percentage is constantly increasing. Employment problems affecting veterans because of arbitrary age restrictions will become more intensified as more of our World War II and Korean veterans reach middle age.

To illustrate the seriousness of this situation, as of November 1958, an active file count disclosed that 30 percent of all jobseekers making application for employment through the Public Employment Service were age 45 or over. In contrast to this, only 19 percent of all placements during the calendar year 1958 were age 45 or over. The difference between the 19 percent placed and the 30 percent seeking jobs is the tremendous task facing all of us, especially the Public Employment Service.

As a result of research data obtained during studies conducted in 1956, the Bureau of Employment Security and its affiliated State agencies are making determined efforts to assist older workers, including veterans, in obtaining gainful employment.

It is our understanding that some of the larger Employment Service offices throughout the country have older worker placement specialists operating on a full- or part-time basis. This type of special assistance has proven most beneficial in locating suitable employment for the older jobseeker. The limited number of older worker employment placement specialists being utilized in the fiscal year 1959, in relation to the results achieved, proves the effectiveness of this special technique. The American Legion urges that an expansion of this type of assistance be provided for in the 1960 budget.

Where pools of unemployed older workers exist, especially veterans, we believe that the local office of the Employment Service should have the older worker employment placement specialist available in all instances.

For the foregoing reasons we respectfully request that the subcommittee give favorable consideration to a reasonable increase over and above the total Employment Service budget request for fiscal year 1960. The additional services to the older and middle-age workers which these funds will provide are absolutely necessary now if we are going to adequately cope with this ever-increasing problem.

VETERANS REEMPLOYMENT RIGHTS

The Universal Military Training and Service Act, as amended, contains an extremely desirable program of direct service to veterans, ex-servicemen, reservists and members of the National Guard who leave their jobs to perform military training or service.

The American Legion has always advocated reemployment rights to those who serve their country in active military service or Reserve training.

We commend the Department of Labor for working out cooperative arrangements with the Department of Defense to alert persons who are eligible for protection under the reemployment rights statutes. Reemployment information and assistance is readily available to ex-servicemen and employers from any of the 19 field offices of the Bureau of Veterans Reemployment Rights. Increasing numbers of young men are availing themselves of this service. The American Legion believes it is imperative for this Bureau to be able to continue to provide vigorous and effective service to those entitled to reemployment rights.

The Department of Labor has requested the sum of \$592,000 for 1960 for allocation to the Bureau of Veterans Reemployment Rights. We understand the sum requested will not impair the Bureau's staff and operations. The requested increase over fiscal 1959 is merely to cover pay increases and other mandatory items.

We, therefore, respectfully request that the budget request of the Bureau of Reemployment Rights be approved.

PRESIDENT'S COMMITTEE ON EMPLOYMENT OF THE PHYSICALLY HANDICAPPED

The American Legion has a longstanding record of cooperation, support, and financial assistance to the Governors' committees on employment of the physically handicapped.

The program of the President's Committee complements the successful record of promotional efforts carried on by the Veterans Employment Service, the State employment security agencies, and other public and private agencies primarily interested in the employment of both disabled veterans and the handicapped. The American Legion would like to take this opportunity of commending the efforts of the President's Committee on Employment of the Physically Handicapped.

COMMUNICATION

Senator HILL. The Chamber of Commerce of the United States has addressed a letter to me requesting deletion of parts of two items from the Department of Labor appropriation portion of the bill. This letter will appear at this point in the record.

(The letter referred to follows:)

CHAMBER OF COMMERCE OF THE UNITED STATES,
LEGISLATIVE DEPARTMENT,
Washington, D.C., May 18, 1959.

HON. LISTER HILL,
Chairman, Labor, Health, Education, Welfare, and Related Agencies Subcommittee, Senate Appropriations Committee, Washington, D.C.

DEAR SENATOR HILL: The Chamber of Commerce of the United States recommends deletion of parts of two items in the Department of Labor appropriation bill, H.R. 6769, because they would, in effect, grant authority to the Secretary of Labor not given to him by Congress in the Welfare and Pension Plans Disclosure Act.

These items appear to be an attempt to do indirectly what Congress refused to do directly when it passed the Disclosure Act originally.

We refer specifically to appropriations of about \$193,000 for the Office of Solicitor for "interpretations and legal advisory services" and to the Bureau of Labor Standards for certain statistical activities. Both expand the roles of their respective offices well beyond the custodial and filing functions assigned the Department by Congress under the act.

The appropriation item, "Salaries and expenses," for the Office of Solicitor proposes to authorize \$2,695,000 for its several functions. Included is \$348,319 for "interpretations and legal advisory services." The House allowed an undisclosed part of this amount (which its hearings indicate may be approximately \$43,000) for interpretations under the Welfare and Pension Plans Disclosure Act.

H.R. 6769 also allows, under the appropriation item, "Salaries and expenses," for the Bureau of Labor Standards, \$2,488,000, which includes approximately \$845,000 for the "registration and disclosure of welfare and pension plan data." We understand that of this amount \$150,000 is for statistical activities under the Welfare and Pension Plans Disclosure Act.

Both of these powers were proposed last year in S. 2888, the welfare and pension bill, but were deleted before congressional action was completed.

I would appreciate it if you would make this letter a part of the record of your current hearings.

Cordially yours,

CLARENCE R. MILES.

NATIONAL WILDLIFE FEDERATION

STATEMENT OF LOUIS S. CLAPPER, ASSISTANT CONSERVATION
DIRECTOR

GENERAL STATEMENT

Senator HILL. Next is Mr. Clapper, assistant conservation director of the National Wildlife Federation.

We are happy to have you, Mr. Clapper.

Mr. CLAPPER. I would like to extend the regrets of our president, Mr. Callison, of Alabama, for not being here.

Senator HILL. He is a mighty good friend and a fine man and one of the great conservationists.

Mr. CLAPPER. Thank you, Mr. Chairman.

Now I would like to present my statement for the record.

Senator HILL. Fine; proceed in your own way.

Mr. CLAPPER. Mr. Chairman and members of the committee, I represent the National Wildlife Federation, a private nonprofit conservation organization with affiliates in 49 States and the District of Columbia. These affiliates are composed of more than 2 million individual sportsmen-conservationists.

FEDERAL GRANTS FOR WASTE TREATMENT WORKS

The National Wildlife Federation, Mr. Chairman, respectfully recommends that the committee consider adopting without change the portion of H.R. 6769, the appropriations bill for the Departments of Labor, Health, Education, and Welfare, and related agencies for 1960, which relates to Federal grants for waste treatment works construction. As passed by the House on April 30, 1959, H.R. 6769 would allocate \$45 million for the construction grants program.

As the House Appropriations Committee report points out, the \$45 million is the same amount voted by Congress for 1958 and 1959. It is \$25 million more than the \$20 million requested but the House committee report contains this accurate and pertinent comment:

The budget for this item was completely unrealistic in view of the needs. It was brought out during the hearings that it would take 3½ years at the rate of appropriations recommended for 1960 just to finance the applications of grants that are currently on hand.

Senator HILL. The truth is, if we did not appropriate but \$20 million, that would be a terrible blow to the whole program.

Mr. CLAPPER. That is right. We would not even be able to hold our own against the inroads of pollution.

WATER POLLUTION CONTROL

We believe it unnecessary to document the case for water pollution control. As all members of the committee are aware, the use of public streams as foul and filthy open sewers is a national disgrace. Progress being accomplished in pollution abatement as a result of the construction grants program, however, is worthy of some brief comment.

The grants program has stimulated the construction of 1,337 projects since it was authorized by the Federal Water Pollution Control Act of 1956.

Of this total, 578 projects are under construction and 356 are completed. All States and Territories have benefited from the construction grants program.

Two-thirds of all communities receiving construction grants have populations of less than 5,000 people, and almost 90 percent of the approved projects will serve communities with populations under 25,000 people.

Construction grants totaled an expenditure of \$113.7 million through 1958, but an additional \$481 million in local funds were raised to more than quadruple the Federal contribution. Of the approved projects, 80 percent help provide new facilities for communities previously discharging raw or inadequately treated sewage into surface waters which ultimately will serve 31.7 million people. Under the construction grants program, the total cost of sewage treatment will be about 25 cents per capita per month.

A \$20 million appropriation would support only some 225 projects. At this rate, Mr. Chairman, we would not even hold our own against water pollution, let alone make progress toward its abatement.

JOINT FEDERAL-STATE ACTION COMMITTEE

The Joint Federal-State Action Committee has developed a plan to turn the sewage treatment construction grants and vocational educational programs over to the States.

It is assumed that the recommended budgetary reduction, together with the announced intention to turn the construction grants program over to the States after the 1960 fiscal year, results from the Joint Action Committee's plan.

Although no legislation to implement such a plan is yet before the 86th Congress, the theory is that the Federal Government would relinquish a portion of the excise tax upon local telephone service to permit States to levy upon it. The National Wildlife Federation believes this plan is not practical for these reasons:

1. In view of pressures exerted upon legislatures few, if any, States would be likely to levy a tax upon telephone service for these purposes.

2. There would be efforts to divert funds to purposes other than sewage treatment plant construction and vocational education even if some States did levy upon telephone service.

3. Even through a complicated allocation plan proposed by the Joint Action Committee, proposed taxes upon telephone service would not provide adequate money to stimulate needed sewage treatment plant construction and provide for vocational education.

4. Telephone companies in many States are rightfully questioning what justification there can be for taxing telephone subscribers for water pollution control and vocational education.

The Water Pollution Control Advisory Board, appointed by the President, has gone on record unanimously as opposing the Joint Action Committee plan.

The same body endorses an expansion, not a decrease, of the construction grants program. The same feeling has been expressed by a heavy majority of State health department officials, which we heard earlier here today.

In 1958, the construction of municipal sewage treatment works rose to \$400 million. This figure reflects a considerable gain over the annual average expenditure of only \$222 million from 1952 through 1956, or prior to the initiation of the grants program.

It also proves local communities could not or would not do the job on their own initiative or strictly with their own resources.

ANNUAL CONSTRUCTION LEVEL

It is estimated that the annual average construction should be maintained at the \$575 million level for the next 8 years if needs are to be met. Such a figure would require doubling of the present Federal construction grants. Measures to double the construction grants now are before Congress.

H.R. 3610 has been reported by the House Public Works Committee and now is awaiting floor consideration. A companion bill, S. 805, is before the Senate Committee on Public Works. The National Wildlife Federation will support both measures.

The National Wildlife Federation, Mr. Chairman, in summation, urges the committee to retain the \$45 million construction grants appropriation allowed by the House. Pollution now not only endangers public health but damages or ruins surface waters for valuable industrial, agricultural, and recreational uses.

Thank you for the opportunity of appearing here today.

That concludes my statement, Mr. Chairman.

We have a new publication on this problem and I would like to leave that with the members of the subcommittee.

Senator HILL. You turn that over to Mr. Downey and that will be fine.

Mr. CLAPPER. I do not believe these are appropriate for inclusion in the record because they have a lot of illustrations.

Senator HILL. All right, you just leave those for the record and we will be happy to have them.

You tell our friend that we would have been delighted to have had him here, but you made a very fine and able presentation for the federation and we certainly were glad to have had you here.

Mr. CLAPPER. Thank you very much, Mr. Chairman.

(Whereupon, at 2:45 p.m., Monday, May 18, 1959, the committee recessed, to reconvene at 2 p.m., Monday, May 25, 1959.)

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR 1960

MONDAY, MAY 25, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 2 p.m., pursuant to call, in room 1316, New Senate Office Building, Hon. Lister Hill, chairman of the subcommittee presiding.

Present: Senator Hill.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

TRAINING OF PUBLIC HEALTH WORKERS

Senator HILL. The committee will come to order.

I have received a letter from Dr. James A. Crabtree, dean, University of Pittsburgh Graduate School of Public Health, in support of the appropriation item for training of public health workers. Dr. Crabtree's letter will be included at this point in the record.

(The letter referred to follows:)

UNIVERSITY OF PITTSBURGH
GRADUATE SCHOOL OF PUBLIC HEALTH,
Pittsburgh, Pa., May 1, 1959.

Hon. LISTER HILL,
Chairman, Subcommittee on Labor and Health, Education and Welfare, Senate Committee on Appropriations, New Senate Office Building, Washington, D.C.

DEAR SENATOR HILL: In the regular appropriation request by the Public Health Service for fiscal 1960, there is an item in the amount of \$1 million for grants-in-aid to support the training programs in schools of public health.

This appropriation is authorized by Public Law 85-544, 85th Congress, H.R. 11414, popularly known as the Rhodes Act.

You will recall that the act was passed by unanimous vote of both the House and Senate and was signed by the President during the 2d session of the 85th Congress. Inasmuch as the bill was under your sponsorship in the Senate, I need not here recall for you the unanimity of endorsement that is received when Congress was considering its passage.

Recalling a provision contained in an earlier act, Public Law 911, 84th Congress, requiring the Surgeon General to call a broadly representative conference during the latter half of 1958 to consider the long-range needs of the country in public health training and to make recommendations with respect thereto which the Surgeon General was directed to submit to the Congress, the Congress very wisely determined to limit the provisions of the Rhodes Act to a 2-year period, recognizing on the one hand the urgent and emergency needs of the schools for assistance now, and on the other, the advantages of having the recommendations of the National Training Conference when considering longer term national policy with respect to this important matter.

I am happy to learn that the recommendations of the National Training Conference have gone forward to the Congress and these bear testimony to a much broader base of unanimous endorsement of the principles of the Rhodes Act for incorporation in long-term policy than appeared at the time H.R. 11414 was being considered for passage.

Because the testimony supporting the act a year ago was so extensive and the urgency of need was so clearly validated, I am reluctant here to burden your committee with comments that are largely repetitious.

However, I do wish to say that with respect to the matter here under consideration, the situation if anything has worsened during the year:

(a) Now as then there is a critical shortage of trained public health personnel in the United States.

(b) Now as then the only source of certain essential kinds of public health training is the 11 schools of public health in the following universities: California, Columbia, Harvard, Johns Hopkins, Michigan, Minnesota, North Carolina, Pittsburgh, Puerto Rico, Tulane, and Yale.

(c) Now as then roughly three-fourths of all graduates of the schools of public health go into public service (local, State, Federal).

(d) It continues to be true that these 11 schools are not local or regional. They serve the specialized health training needs of all the States, territories, and possessions, of all the Federal health agencies (civilian and military) and the principal international organizations the support of which is viewed as an essential element of our country's foreign policy.

(e) The very nature of the instruction required to be given by the schools is such that the costs to the schools are greatly in excess of what they receive in tuition and fees (a deficit of an average of over \$4,000 per student).

(f) Because of the gradually mounting costs and the correspondingly increasing deficits, the financial position of the schools is critical. Many key teaching positions are vacant for lack of salaries.

The six private schools are heavily dependent upon their incomes from endowment. Some of them are being forced to draw upon principal in order to meet their minimum operating needs.

Five of the schools are State owned and operated. The legislatures of these States are understandably reluctant to provide all the increases in needed revenue as long as their schools are in effect subsidizing the equivalent of nearly 90 percent of the costs for persons who will serve other States and the Federal Government.

The \$1 million here requested by the Public Health Service for fiscal 1960, if appropriated, would cover less than a third of the deficit now being incurred by the schools for training only those students sponsored by Federal, State, and local governments.

On the other hand, this assistance would have a most salutary effect upon the schools as aid and assistance to them in their efforts to meet their national and international obligations.

Mr. Chairman, I am intimately familiar with the long record of this committee of giving liberal support to programs that are in the interest of the Nation's health, and I am especially cognizant of the long distinguished leadership that you have exerted in creating this record.

I speak for all my colleagues when I express to you and the committee our grateful appreciation, together with our full confidence that your committee will act favorably on this request of the Public Health Service for the assistance that our schools of public health so urgently need.

Respectfully yours,

JAMES A. CRABTREE, M.D.,
Dean, President, Association of Schools of Public Health.

HEALTH EXAMINATION SURVEY

Senator HILL. Dr. James H. Sterner, Medical Director, Eastman Kodak Co. and Clinical Associate Professor of Medicine at the University of Rochester, has written to me requesting inclusion of funds for the health examination survey of the general health survey proposed to be conducted through the Public Health Service. Dr. Sterner's letter will be included at this point in the record.

(The letter referred to follows:)

ROCHESTER, N.Y., April 20, 1959.

Hon. LISTER HILL,
U.S. Senate, Washington, D.C.

DEAR SIR: As a member of the Advisory Committee to the National Health Survey, I have had the opportunity to observe at close range the progress of this most important index of the health of our Nation. For the first time, we are developing the kind of medical intelligence which is essential to the evaluation of our exceedingly complex health problems, and which must be a requisite to any intelligent planning of the attack at a national level.

The emerging values of this program were so effectively demonstrated in connection with the recent National Health Forum, for which I was privileged to serve as general chairman. This forum, sponsored by the National Health Council, with a focus on "The Health of People Who Work," brought together national leaders from Government, labor, management, voluntary health agencies, and professional organizations to cooperatively consider and to explore ways of improving the health of people who work.

The magnitude of the sickness-absence problem has been defined in past years in various "guesstimates," but the information presented by Secretary Flemming and supplied by the National Health Survey—"500 million man-days lost from work this year in the United States because of sickness" carried an authority and validity that demanded attention. The kind of illness, the contribution of acute and chronic components, and many other important parameters of health and illness—this is the type of information so critically needed, and which now is beginning to emerge from the Survey.

It is my understanding that the budget for the National Health Survey now being considered by Congress does not provide for the addition to the program of a most important element, the health examination survey. This medical examination program is essential to the validation, objectivity, and acuity of information developed through the household interview technique. The effectiveness of the method has been demonstrated by pilot study and can be and should be added to the current program as soon as possible.

The many urgent, important health issues now confronting the American people, the Congress, and the medical profession require the best possible medical intelligence, if wise and effective action is to be taken. I believe that the National Health Survey is, and increasingly will be, the most valuable and reliable index of the health of our people. The health examination survey program should be started as soon as possible. My concern with its absence from the program this coming year, under present budgetary considerations, has prompted my bringing this to your attention. I respectfully ask your consideration of this matter.

Very truly yours,

JAMES H. STERNER, M.D.

AMERICAN ACADEMY OF CHILD PSYCHIATRY

STATEMENT OF DR. J. FRANKLIN ROBINSON, WILKES-BARRE, PA., REPRESENTATIVE

PREPARED STATEMENT

Senator HILL. Dr. J. Franklin Robinson.

Will you come around, please, Doctor, and have a seat there in front of the microphone?

Dr. ROBINSON. Yes.

Senator HILL. We are glad to have you here, Doctor.

Have you filed your statement, sir?

Dr. ROBINSON. Yes, I have.

Senator HILL. Then your statement will appear in full in the record.

(The statement referred to follows:)

STATEMENT OF J. FRANKLIN ROBINSON, M.D., DIRECTOR THE CHILDREN'S SERVICE
CENTER OF WYOMING VALLEY, INC., WILKES-BARRE, PA.

ON CURRENT STATUS OF CHILD PSYCHIATRY

That child psychiatry is a subspecialty of psychiatry requiring special training for the development of competence has been declared in the establishment of certification in child psychiatry by the American Board of Psychiatry and Neurology. This arrangement postulates that in order to learn the techniques and procedures required in the treatment of children a psychiatrist must initially equip himself with an understanding of the clinical material and principles involved in the practice of adult or general psychiatry. With this foundation he can undertake the specialized training that is necessary for work with children. The Board requires a minimum of 2 years of approved training in a satisfactory facility for the practice of child psychiatry. The specialized training in child psychiatry must follow a minimum of 2 years of training in general psychiatry. The adequacy of the candidate's basic training is measured through the requirement that he become certified in psychiatry by the American Board before he applies for examination of his competence in child psychiatry.

For 50 years there have been psychiatrists who devoted their full time to work with children. With a primary interest in juvenile delinquency and probably influenced by Southard's and Fernald's use of ancillary disciplines in a collaborative program, William Healy organized the first clinic for children to serve the Chicago juvenile court in 1909. By 1912 he had moved to Boston, and with the Judge Baker Foundation developed a program that offered services for the broad spectrum of difficulties which were represented during childhood. The delinquent was recognized as a troubled person who declared his need for help through his misbehavior and who, because he was not mature, could not provide and plan for himself with sufficient judgment and perspective. Efforts were directed toward understanding the child in the use of his capacities within the various environments which comprised his life.

With the assistance of the Commonwealth Fund of New York the National Committee for Mental Hygiene nurtured the development of clinics sponsored by a variety of community interests. The words "community clinic" came into common use to designate that the service was part of an agency structure designed to meet a need which was recognized by the various organizations which served children. The home, the school, the orphanage, the family agency, the settlement house, and group recreational agency were concerned about children who could not accommodate themselves satisfactorily. The Bureau of Children's Guidance of New York became an active training center and professional staff was developed which could man the newly established clinics. Demonstration clinics were financed for specified periods of time. The effectiveness of the early efforts is testified by the record of communities which continued the services by providing on-going funds through civic, community chest, or other sources.

During the 1920's work centered around the principal of assisting the child to adjust to the setting in which he lived. The standard procedure involved the obtaining of an extensive history which at its best was an evaluation of the important influences which impinged upon the child. Histories became more than descriptive and were a compilation of the attitudes and reactive tendencies of each member of the family, teachers, classmates, friends, religious advisers, etc. Interviews held often with others than the parents. When children were in foster care, information was obtained from foster workers and perhaps directly from the foster parents.

Many patients were referred by agencies, and it was the general practice to maintain a central social register in each community so that a clinic could know when the family had had contact with another social agency. The co-operative case was one in which the agency with professional staff (usually social casework) contributed historical information and took responsibility in whole or in part for carrying out recommendations. The service was rendered to the referring agency as well as to the family.

The history included an account of the child's development both physically and socially. The evaluation of his aims and tendencies was augmented by the psychologist's measurement of his potentials with standardized tests (later with projective techniques) and the psychiatrist's appraisal in the interviews with the child. The information so compiled was reviewed at a diagnostic staff

conference to which representatives of other agencies, teachers, ministers, and so forth, might be invited. At such a conference recommendations were formulated and their commission was assigned to members of the clinic staff or others. The clinic was in the position of evaluating the influence of parents and other professional workers upon the child and often found itself directing the practices of schools and other agencies.

While other social agencies were learning to recognize the variations in ability and behavior of children, the clinic easily assumed an authoritative role and the psychiatrist was the natural leader of the clinical group. Social workers and psychologists learned to recognize the common disorders of children and case-loads included more and more children who were not grossly deviant. Rivalries developed among the disciplines within some of the clinics and even between clinics and other self-sufficient agencies.

Satisfaction with diagnosis emphasized the importance of treatment. Interest in treatment was stressed further as knowledge of the nature of the difficulties of children became diffused beyond the profession of psychiatry. By the end of the twenties, a good deal of work was being done with parents. Initially, the purpose was to prevent parents from interfering with the efforts that were made to benefit the child. This sometimes took the form of treatment of the parent which might be attempted by whichever member of the clinic team had developed skill in psychotherapy. Caseworkers and psychologists, as well as psychiatrists, were turning to personal analysis as a measure of enhancing their skill in therapy, and the role of the psychiatrist as director or leader of the clinic group was sometimes challenged.

Skills in individual psychotherapy did develop. Americans went to Europe to learn the techniques of the analyst, and during the 1930's many European analysts came to the United States. In this country effective treatment procedures were developed by child psychiatrists who were not identified with the analytic movement. Analysts and nonanalysts have worked side by side in the United States and some times within the same clinic. We are still progressing in our techniques of individual treatment of children steadily enough so that it is yet too early to outline exclusively what should be the training of a child psychiatrist and what his treatment techniques. There, however, is general agreement about a good deal that he must know and about the training and working experiences that he must have.

As the contribution of the clinic centered increasingly around the provision of psychotherapy, the contacts of the clinic staff became more limited to members of the patient's family or those social workers in foster care agencies who had direct responsibility for the child. As mentioned above, the professionals in other agencies or institutions became informed on the psychological aspects of deviations in growth and development and did not call upon the clinics as frequently for diagnostic assistance. They resented the efforts of clinics to direct their practices. Clinical workers also began to appreciate the complexity of other professional tasks and became cautious about assuming responsibility for recommendations, the effectiveness of which rested with the work of another agency.

Work became oriented around the diagnosis and treatment of the child. There was a period when certain clinics saw their task as the treatment of the child-parent relationship. This gave way to a recognition that treatment was with the individuals who were in relationship to each other, with the child as the patient. A variety of approaches developed in considering the job with the parent. While some clinics outlined their task as the treatment of the parent, others viewed work with the parent as a casework service. I believe that in the majority of clinics today the procedures which are carried out with parents are materially influenced by a primary concern for the successful treatment of the child. One of the major advances in modern psychiatry has been the understanding of the importance of the influence of other members of the family upon a patient. This has developed from the work of the child guidance clinics.

As clinical contacts in child psychiatry became more circumscribed to the child and his parents or members of his immediate domestic environment, private office work became feasible. Private practice had to await the development of clinical skill and in turn the understanding of the remainder of the medical profession and the lay public so that services would be solicited. Early attempts were made to treat children individually with a minimal amount of work with the parents. Private practitioners, including child analysts, quickly recognized the importance of doing some work with parents. It may

indeed be the most important influence in the growth of private child psychiatric practice was the general acceptance which psychiatry enjoyed following World War II. I believe that private practice was an outgrowth of the circumstance that procedures involved in the treatment of the child and his guardians could be encompassed physically within the private office.

It remains for experience to determine whether individual practice, which may indeed include the collaboration of other disciplines, will become a common method for the provision of child psychiatric services to those families who can afford a private fee. Today there are adherents of the private office arrangement and adherents of the clinical method, each of whom considers his way of practice to hold forth advantages. The answer to this question may rest upon personal preference. It may be determined economically. It may be influenced by forces which bear on the practice of medicine generally which we cannot now foretell. In any event, private practice in child psychiatry has become a reality since World War II, even as the clinics themselves have become more numerous.

With the growth of child psychiatry it was inevitable that professional associations developed. The National Committee for Mental Hygiene had benevolently fathered the development of the clinics with the financial aid of the Commonwealth Fund. During World War II the Division of Community Clinics of the National Committee for Mental Hygiene organized meetings of the clinical directors to elicit their participation in the management of the affairs of the clinics. Practice and procedures were discussed and soon the annual assembly of clinic personnel included meetings of social workers and psychologists. Following the war, it was evident that the growth of the clinics would be so rapid and so extensive that coordination through personal visits and interest by members of the staff of the National Committee for Mental Hygiene would be difficult.

The need for authoritative definition of standards for practice and training was emphasized as new clinic boards were being organized and staff positions created which could not be filled readily. At a meeting of clinical directors convened by the National Committee for Mental Hygiene a decision was made to create the American Association of Psychiatric Clinics for Children.

The American Association of Psychiatric Clinics for Children was initially concerned with protecting the level of child psychiatric clinical practice. The policy was to uphold the professional standards of the professional disciplines which worked collaboratively in the clinics. Social casework had clearly defined standards for training and experience. They were established by the American Association of Psychiatric Social Workers (later AASW). Clinical psychology was actively establishing itself as a clinical and professional discipline and shortly declared its training requirements which were implemented at the graduate level in universities. Child psychiatry had no defined standards for the determination of competence of its representatives beyond the achievement of certification by the American Board of Psychiatry and Neurology which was in adult or general psychiatry. The board had established the precedent of accepting a satisfactory year of training in a children's clinic as the third of the 3 years of required academic training.

The American Association of Psychiatric Clinics for Children defined requirements for the training of child psychiatrists who were to work in the member clinics. It also outlined requirements for clinics that were to conduct training which would be approved by the association. Because these were the only existent standards, other organizations supported these requirements, and AAPCC standards came to have an influence in American psychiatry beyond that which was initially conceived. Review and approval by the association, however, could be extended only to those clinics which were interested in being identified with the association and involved only personnel employed in the clinics.

During the years following World War II, there was controversy over the opinion held by child psychiatrists that special training was required to do adequate psychiatric work with children. The creation of a Committee on Child Psychiatry within the newly formed Group for the Advancement of Psychiatry, the establishment of a Committee on Child Psychiatry in the American Psychiatric Association, the naming of a section in the American Psychiatric Association, and the establishment of a Committee on Training in Child Analysis in the American Psychoanalytic Association were acknowledgements of the discreteness of the field. These units created a forum for child psychiatrists who were in individual practice, and include as well the psychiatrists from the clinics.

A recognition that the scope of child psychiatry went beyond the organized clinics, including individual practice and some individual teaching appointments, brought forward an interest in association of child psychiatrists. Concomitantly, sentiment developed in certain areas of organized general psychiatry that within the association of clinics the interests of the child psychiatrist might be subjugated to a multidisciplinary majority. The American Association of Psychiatric Clinics for Children itself recognized that child psychiatry differed from the other professional disciplines in that it had not a set of standards for training which was declared and upheld by a group within its own discipline, not officially associated with AAPCC and which could serve as a standard for the evaluations conducted by AAPCC.

These influences and a desire for academic interchange within a professional group limited to the child psychiatrists led to the organization of the American Academy of Child Psychiatry. The academy has established criteria for the invitation of child psychiatrists to its membership. It has been considering a set of standards for training. It is in the process of determining how actively and extensively its membership wishes to assume leadership in American child psychiatry.

A year ago the Council of the American Psychiatric Association endorsed, on the joint recommendation of its Committees on Child Psychiatry and on Standards for Hospitals and Clinics, a statement that child psychiatry was a subspecialty of psychiatry and that competence called for special training. The American Psychiatric Association later accepted in principal a statement of Standards for Training that called for 2 years of specialized training in child psychiatry in addition to 2 years of training in general psychiatry for those who would work with children.

As early as 1948, sentiment was advanced for the establishment of certification in child psychiatry. The American Board of Psychiatry and Neurology looked favorably upon the proposal and consulted a group of child psychiatrists. Possibly because opinions on procedure were not consistently supported, the board did not act at that time.

In the summer of 1957, the matter of certification in child psychiatry was again raised by the American Board of Psychiatry and Neurology. Suggestions had been advanced that there be an independent board in child psychiatry. This might have been a difficult proposal for which to obtain the approval of the Advisory Board for Medical Specialties which has declared itself against the unnecessary recognition of additional specialties in the field of medicine. It appeared that there was reasonably general accord among child psychiatrists that certification be carried on under the authorization of the parent American Board of Psychiatry and Neurology. The arrangement declares child psychiatry as a subspecialty of psychiatry.

After consulting a number of individuals in the field of American child psychiatry, several recognized leaders were summoned to a meeting to consider the advisability of recommending the establishment of certification procedures. Following the favorable outcome of this meeting, a Committee on Child Psychiatry, consisting of six members, was appointed by the American Board of Psychiatry and Neurology. Meanwhile, the Advisory Board for Medical Specialties had been asked to approve the project. The advisory board authorized the American board to undertake steps to evaluate authoritative opinion in child psychiatry and notified the boards in the other specialties.

The Committee on Child Psychiatry met in June 1958 with the president and secretary of the American Board of Psychiatry and Neurology, and drew up a statement of requirements and of procedures for examination and certification of child psychiatrists. The American Board of Pediatrics requested further consultation, and at a meeting of representatives of that board and the American Board of Psychiatry and Neurology, an agreement was reached to include a pediatrician on the certifying committee. The pediatrician would act in an advisory capacity and would not serve in the examination of candidates. Members of the Committee on Child Psychiatry were among the representatives of the American Board of Psychiatry and Neurology who attended the meeting with representatives of the Board of Pediatrics. The statement of policies regarding training, application and examination was eventually approved by the various boards and the Advisory Board for Medical Specialties.

The American Board of Psychiatry and Neurology then established a Committee for Certification in Child Psychiatry. This was in February 1959. The brochure of "Information for Applicants Applying for Certification in Child

Psychiatry" states that "This was done to establish officially the field of child psychiatry as a definite area of subspecialization in psychiatry and to provide a means of identifying the properly trained, experienced child psychiatrist from those who claimed proficiency in this field without adequate background and qualifications."

The brochure states further :

"The actual mechanics of certification of qualified candidates and the establishment of basic policies has been delegated by the American Board of Psychiatry and Neurology to this special committee which will operate under the supervision of the parent board. This Committee on Certification in Child Psychiatry consists of six certified child psychiatrists appointed by the board and responsible to the board. As a committee of the board, it operates under all the basic policies established by this corporation.

"Psychiatrists who have been continuously in the full-time practice of child psychiatry since July 1, 1950, or before may apply for certification on record (without examination). If the major interests and activities of their practice is with children or adolescents, this will be regarded as full-time practice of child psychiatry. Applicants must have been previously certified in psychiatry by the American Board of Psychiatry and Neurology except in those instances where this requirement has been waived by the board for good and sufficient reasons.

"This certification is for those who are currently in the specialty of child psychiatry and not for those who have been in the field in the past. Applicants who have previously practiced in the field of child psychiatry but who left this specialty for other types of practice must show that in the 2 years preceding application their major interests and activities have been in the field of child psychiatry.

"Those child psychiatrists not qualifying under the above rules and regulations will be considered as applicants for certification by examination. Their major interests and activities in their current practice must be devoted to psychiatric problems of children and adolescents. Should they have left the field of child psychiatry for other types of practice but otherwise fulfill the training and experience requirements, they must show that the 2 years prior to application have been in specialized practice in child psychiatry."

To qualify for examination candidates must have 6 years of psychiatric training and experience. Two years shall have been satisfactory training in child psychiatry in programs acceptable to the Committee on Certification. The statement is included in the brochure that "It is advisable that those seeking the certificate of specialist in child psychiatry who receive their primary training in psychiatry should have training in the pediatric aspects of general medicine. Such training may be offered in lieu of 2 years of practice experience."

Certification will identify the properly trained and experienced child psychiatrist who has been actively engaged in the field. It will be necessary to establish a basis for the evaluation of training and of the settings from which training will be approved. This will be an early task for the Committee on Certification in Child Psychiatry.

It is too early to anticipate fully the influence certification will have in the field of child psychiatry in relation to practice and to professional organizations. The competence of practitioners who offer their services to children should quickly assume a generally adequate level. Influences in relation to professional organizations will manifest themselves more gradually.

The American Psychiatric Association does not have standards for outpatient clinics in either child or adult psychiatry excepting as these clinics are associated with a mental hospital. There is a Committee on Standards for Hospitals and Clinics. Outpatient clinics currently achieve approval as they meet the recommendations for mental hospital personnel and the approval of the hospital administrator. There is need for the declaration by the American Psychiatric Association of standards for outpatient clinics which operate independently.

The American Association of Psychiatric Clinics for Children will now be in a position to support the standards for training in child psychiatry determined by the Committee on Certification in Child Psychiatry of the American Board of Psychiatry and Neurology rather than establishing requirements of its own. Requirements for certification are similar to those outlined for the director of a clinic approved for training with AAPCC. They are higher than those enforced in evaluating the competence of psychiatric director of a clinic

asking consideration for membership. If standards for training in child psychiatry become sufficiently well defined, AAPCC will be in a position to place its major emphasis on the composition and collaborative working arrangement within the clinic group.

The Academy of Child Psychiatry has membership requirements which are somewhat more exacting than those defined by the board. More working experience is necessary, and the candidate must have had a primary and long continued interest in child psychiatry. At present, certification by the American Board of Psychiatry and Neurology is a membership requirement for those individuals who completed their training after January 1, 1946. The academy has not yet had an opportunity to consider whether it will require certification in child psychiatry of those who are to be invited to its membership.

In half a century child psychiatry has become established as a field of medical practice within the specialty of psychiatry for which special training is necessary to acquire competence. Standards and procedures for the evaluation of candidates for certification and their training will be refined as examinations are conducted. Standards will be developed also for the evaluation of the setting in which satisfactory training can be obtained. The professional organizations concerned with the field of child psychiatry will continue to provide the forums from which knowledge and recommendations for standards of practice and training will evolve.

CHILD PSYCHIATRY PROBLEM

Senator HILL. We would be very happy now to have you make any statement you see fit, sir.

Dr. ROBINSON. What I have to say will be brief.

I want to say that child psychiatry is a subspecialty within the field of psychiatry.

Competence in child psychiatry requires special training in addition to that which is necessary for the practice of adult psychiatry. Specialist certification procedures are being currently introduced by the American Board of Psychiatry and Neurology to identify properly trained and experienced child psychiatrists.

The American Academy of Child Psychiatry wishes to place in testimony a paper entitled "The Current Status of Child Psychiatry" which outlines the developments in the field of child psychiatry which have led to the establishment of certification procedures in child psychiatry.

I shall not discuss the importance of the mental health problem. The committee is informed of this.

I would point out that when testimony has been invited by governmental committees or agencies in Washington, it has been provided by the heads of departments of psychiatry in medical schools or top administrators of State mental health and hospital systems. These are adult psychiatrists. The key child psychiatrists—the leaders in child psychiatry—direct smaller functional units—clinics or inpatient services—which operate under the direction of departmental heads or more commonly under independent private auspices such as the Community Chest, United Fund, or in some cases under private endowment.

We would urge that when you are considering child psychiatric needs you seek advice directly from child psychiatrists.

Of the approximately 10,000 psychiatrists in the United States, perhaps closer to 11,000, at least 1,000 declare they are doing some work with children or adolescents. Over 1,000 child psychiatric clinics are listed in some of the directories of clinics. Accordingly, more than 1 in 10 psychiatrists in the United States does some of his work in child psychiatry.

FEW QUALIFIED PRACTITIONERS

Now, only 170 of these people qualify as members of the American Academy of Child Psychiatry. Membership in this association requires 5 years of experience following adequate training. It may be fair to state then that there are about today 300 well-trained child psychiatrists in the United States. Certification procedures in child psychiatry have only recently been instituted by the American Board of Psychiatry and Neurology so that we do not yet know how many individuals will qualify under that yardstick.

Of the more than 1,000 clinics serving children and adults, only 130 qualify as members of the American Association of Psychiatric Clinics of Children.

The need for training child psychiatrists is apparent.

Funds for training in child psychiatry, the development of clinical facilities, and for research, should be placed in the hands of the leaders in child psychiatry. The use of such funds should be administered by child psychiatrists who understand this specialized field.

Appropriations are now made through administrators who are, for the most part, trained in adult psychiatry.

MAJOR NEEDS IN FIELD

Briefly, the needs in the field of child psychiatry are:

(1) Increased training opportunities. This would include measures for recruitment into the field and the provision of training stipends which are comparable to those in other psychiatric and medical fields.

(2) The development of clinical facilities. Both outpatient clinics and inpatient or resident treatment centers.

(3) A proportion of the clinical facilities should be of a caliber such that they can serve as training centers. Some of the training units should be associated with medical teaching centers so that both graduate training and undergraduate indoctrination can occur.

Finally, we would point out that a large volume of psychological work done with children today is carried out in child care or welfare programs. This means that it is conducted by social workers and sometimes by psychologists. The actual treatment of children should be conducted by, or under the direction of, competent child psychiatrists.

Psychiatric consultation should be available to child welfare services which are finding that an increasing proportion of their children are psychiatrically disturbed. With the development of public assistance programs, including mother's assistance, homes are no longer broken solely because of economic need. The children who become dependent public charges are now commonly those who cannot be maintained at home because of their behavior or who have been emotionally damaged because of the personality disorganization of the parents. We will continue to utilize the services of the allied professional disciplines in the care and management of children. The aim should be to place the direction of the care of disturbed children under qualified child psychiatrists.

Senator HILL. Doctor, let me ask you this. I appreciate your statement.

RELATION TO PRESENT BILL

Have you any suggestion particularly with reference to any particular item in this bill that you would like to see changed or amended in any way, the appropriations bill before us?

Dr. ROBINSON. Now, I am not certain that the point we would like to make, the specific point, comes definitely into the bill. We want to point out that in the training of child psychiatrists, the candidate completes medical school, has a year of internship and then 2 years of adult psychiatry, so that he comes to child psychiatry after he has had at least 3 years of postmedical school training. Under the present U.S. Public Health stipends which do increase as of July 1, the candidate coming into child psychiatry may receive a stipend of \$4,200; in his second year, which is his fifth year of graduate training he gets \$6,000, which is a considerable increase. This is still not large enough to attract people into the field and nowadays usually have a family and if we compare this, for example, with the stipends under the same provisions for psychologists we find that a psychologist after he has completed his Ph.D. degree will get a stipend of \$6,000 the first year and \$7,000 the second. So that you see he has his arts degree and then 3 years of graduate work and then is eligible for the \$6,000 level. The psychiatrist has his 3 or 4 years of arts, 4 years of medical school and then in 3 years he is only eligible for \$4,200 level. We would like to see that pushed up.

But also the other point, that we would like to have the child psychiatrist in the administration office, so that the planning in our field is carried on by child psychiatrists themselves. We have had a very sympathetic group in the Public Health Service but they still have not been able to see the innate problems. For example, Dr. Vestermark, who is dead now, but whom we liked so much, used to say that a child psychiatrist should be dedicated. We appreciate this but we think dollars and cents speak louder than dedication.

Senator HILL. You have talked this over with the officials of the Institute of Mental Health?

Dr. ROBINSON. This has been presented to them. I don't know whether it has been presented forcibly enough. We are going to do it.

Senator HILL. I see. Have you made any effort to present the matter yourself to them?

Dr. ROBINSON. No, I have not; as a matter of fact, I did not know until Friday night I was going to be here today.

Senator HILL. I see.

Dr. ROBINSON. But I am going to as the next step.

Senator HILL. Doctor, we want to thank you very much. Thank you, sir.

Dr. ROBINSON. Thank you.

Senator HILL. We appreciate your appearance.

Senator HILL. Is Dr. Louis Lasagna, of Johns Hopkins here?

Mrs. Louis S. Gimbel, Jr., here?

Do you have some other witnesses with you?

Mrs. GIMBEL. I have Dr. Laqueur.

Senator HILL. Ask the doctor to come up with you. You come up together then. Just have seats.

Mrs. GIMBEL. Thank you.

Senator HILL. Doctor, would you come right up with Mrs. Gimbel? All right, Mrs. Gimbel. Glad to have you. Proceed.

**STATEMENTS OF MRS. LOUIS S. GIMBEL, JR., VICE PRESIDENT,
INTERNATIONAL CONFERENCE ON THE INSULIN TREATMENT
IN PSYCHIATRY, ACCOMPANIED BY DR. H. PETER LAQUEUR,
SUPERVISING PSYCHIATRIST, CREEDMORE STATE HOSPITAL,
NEW YORK**

GENERAL STATEMENT

Mrs. GIMBEL. I want to express my gratitude that I was able to come today to testify before you.

I am Mrs. Elinor Gimbel, vice president of the Manfred Sakel Foundation. This foundation was founded over 15 years ago and our single concern is the treatment of schizophrenia which is one of the most prevalent, costliest, and without question, one of the most neglected of all major diseases.

NUMBER OF SCHIZOPHRENICS

How shocking and disturbing it is to contemplate on the fact that there are over 400,000 schizophrenics in our mental hospitals today—far more than the total number of patients in hospitals suffering from cancer, heart disease, polio, tuberculosis, and many other diseases combined.

Despite the progress we have made in our mental hospitals, far too many schizophrenics who enter them never return to their families again. This is a frightful and shocking picture, I know, but fortunately there are steps we can now take which hold great promise for improving it.

INSULIN SHOCK THERAPY

Gentlemen, you are no doubt aware of the fact that medical authorities have generally agreed that insulin shock therapy is the best available approach to the treatment of schizophrenia. Although this treatment was discovered by Dr. Manfred Sakel some 30 years ago and its success has been demonstrated time and time again throughout the world, its use has been limited for various reasons. The difficulties are the high costs involved, the shortage of properly trained personnel to establish and operate insulin units, possible danger to the patient, and the resistance of the more psychoanalytically oriented psychiatrists to any form of physical treatment.

Last October, the International Conference on the Insulin Treatment in Psychiatry was held at the New York Academy of Medicine. It was gratifying to hear reports on the use of insulin treatment for schizophrenia in all continents of the world. Many modifications of the original method are now in use with insulin treatment being used in conjunction with tranquilizers, electric shock, and psychotherapy. The considerable expense and danger, as well as the scarcity of trained personnel, however, have continued as roadblocks to a more general acceptance of insulin treatment for schizophrenics.

CREEDMORE STATE HOSPITAL STUDY

Those of us who have been concerned with this tragic and dreaded disease have been greatly heartened by the results of a 7½-year study which was recently completed at Creedmore State Hospital. A New York Times editorial on May 6 had this to say on this exciting and encouraging development:

Now comes the report from Creedmore State Hospital, at Queens Village, N.Y., presented at the meeting of the American Psychiatric Association at Philadelphia, by Drs. H. Peter Laqueur and Harry A. LaBurt, that they have developed a modified method for administering insulin coma that "considerably reduces the dangers and cost of the treatment while the benefits are fully sustained." This is, indeed, news of the greatest significance. It removes the greatest obstacle of what is now universally accepted as the best method for returning the victim of schizophrenia back to the world of reality. What is more, it promises to lead to a better understanding of the chemical and physiological causes responsible for the condition and thus to open the way to the eventual elimination of one of mankind's greatest scourges.

With this new technique, Dr. Laqueur reported the recovery of 78.5 percent of the 255 treated patients to such a degree that they can live and work again in the community.

The time has come, we feel, for this great committee to step into the picture and recommend the Federal funds needed to furnish a national program to make this proven treatment available to the hundreds of thousands of schizophrenics who can possibly benefit from it.

For specific recommendations, may I present to you Dr. H. Peter Laqueur, supervising psychiatrist of the Creedmore State Hospital, doctor of psychiatry, who is a very modest man, is the ninth man in his family of five generations to be a doctor.

Again I would like to paraphrase William Lawrence, the scientist-editor of the New York Times, who always called Dr. Sakel the Pasteur of psychiatry and he now says through Dr. Laqueur the door is open for the full benefits of the mentally ill.

It is my pleasure to present Dr. Laqueur.

Senator HILL. Doctor, we are happy to have you here and glad to have you proceed.

Dr. LAQUEUR. Thank you, Senator.

Mr. Chairman, my name is Dr. Peter Laqueur and I am presently serving as supervising psychiatrist at the Creedmore State Hospital in New York.

I have devoted the better part of the last 25 years in working in the field of psychiatry and endocrinology, and have studied psychiatry and glandular illnesses in the Netherlands and also at Mount Sinai Hospital in New York where I am now senior clinical assistant. During World War II, I served as an officer in the Netherlands armed forces where I was engaged in counter-intelligence work and in psychological warfare.

HISTORY OF INSULIN TREATMENT

As Mrs. Gimbel has explained insulin coma has been used as an active treatment for schizophrenics for almost 30 years. However, because it was considered dangerous and expensive by some, and unreasonable and unnecessary in this time of modern psychological drugs by others, the treatment has not been used for a great many patients who could have profited from it.

In past years, we have seen that many hospitals have decreased the number of patients treated with insulin coma. Some have even closed their insulin wards completely. The fact is that there are fewer physicians being trained in this special technique today.

There is increasing evidence that tranquilizing, energizing and modifying drugs are not always capable of arresting and reversing severe mental disintegration processes. I feel very strongly that it is not wise to discard the insulin coma method that has given benefit to the many thousands of patients, no matter how empirical it may be.

MODIFIED FORM OF TREATMENT

For the past 7½ years we have been developing a modified insulin coma treatment at Creedmore State Hospital. Under this method we have administered insulin coma in a way which very considerably reduces the dangers and expenses of the treatment while the benefits are fully sustained. As you will see from the information which I will give you about this procedure, we feel that we have successfully removed some of the most important obstacles which have stood in the way of making this treatment available to the hundreds of thousands of schizophrenics who can benefit from it.

First, let me mention the extent to which and the condition in which the treated patients were discharged and sent out to live and work again in their own communities. Over the 7½-year period we treated a total of 255 patients. Practically all of them were severely ill when they came into this treatment. A good number of them had failed to recover with psychotherapy, drug therapy and or electric shock treatment. One of the most significant results of our work is that at the present time more than two-thirds of them are back in their home communities, have adjusted to their families, and have been rehabilitated to the point where the major number of them are back at work at jobs which are as good as, and in many cases better than the last jobs which they had held.

Gentlemen, you can readily appreciate the significance of this successful experience. If you were to apply our method to let us say 10,000 cases per year instead of just a few hundred, we could have between 6,000 and 7,000 of them back in their homes with a more understanding family. Moreover, they would again be productive taxpayers instead of being patients who are gradually deteriorating in custodial type mental hospitals, where they often need to be tranquilized in order to avoid destroying themselves or others.

SAVINGS TO STATES

The savings to our States over the years both in maintenance costs and the cost of building more mental hospitals would run into many millions of dollars. More important, however, are the precious savings in human values. There is no valid reason today for letting these hundreds of thousands of patients slowly disintegrate in mental hospitals when we know and have scientific evidence of a method of treatment which can help them. And bear in mind, gentlemen, that whenever we can succeed with such a patient we are at the same time relieving the anguish and despair and a severe financial burden of an unhappy family.

Gentlemen, I will not burden you with the complicated and detailed aspects of our studies during the past 7½ years. I should like to leave with the committee a 36-page paper which I presented at the annual meeting of the American Psychiatric Association on April 30, 1959.

Senator HILL. We are happy to have that, Doctor. Thank you, sir.

NEW METHOD OF INSULIN USE

Dr. LAQUEUR. In essence our new method consists of introducing insulin into the organism slowly and over an extended period of time rather than suddenly and in large doses. In this way it becomes fully effective in much smaller amounts than under the old method. Its effects are more easily controlled and adjusted if our strict instructions for diet are carefully followed. It gives the patient fully benefit of treatment during the morning and leaves him clear, lucid, and without reactions in the afternoon and evening. This is especially important since afternoon can be used for beneficial psychological rehabilitation and family therapy. Therefore, within the period of several months during which the patient is on an insulin ward, he can already fully participate in a rehabilitation program in which he becomes more responsible and more self-governing day by day instead of feeling drowsy and helpless in the afternoons and evenings.

Insulin is a substance produced by our own body. It is an endogenous substance which if added to the organism is absorbed and utilized. It does not have to be shunted to the organs of defense nor will it be rejected. It adds to and alters metabolic function in such a way that the organism "gains strength."

As I mentioned previously this method was successful with better than two-thirds of the patients. You will remember that one of the obstacles for a more widespread use of the insulin coma treatment was the element of danger to the patient. During this entire 7½-year period we have had no fatalities and only one brief uncomfortable moment. As for the problem of cost, our study has demonstrated that this treatment can be provided at a cost of approximately \$5 a day over and above the average daily expense of a State hospital patient. It is important to bear in mind that schizophrenics who do not get better stay an average of 8¼ years in State hospitals costing the community about \$12,000 during that time and not producing anything. If with our method a patient can be sent home fit to work within an average of 7 months he may by then have cost about \$1,900 in hospitalization and treatment but frequently becomes a taxpayer again.

NATIONAL PROGRAM NEEDED

Gentlemen, there has never been any question in anybody's mind that we are dealing with a national problem which calls for a national program. Can you imagine the public indignation which would have been aroused at the time the Salk vaccine for polio was discovered if the U.S. Government had not instituted a bold national program to place this precious means of treatment in the hands of physicians throughout the country simultaneously? I feel that we are at exactly that point today with respect to the treatment of schizophrenics.

I feel justified in equating Salk's discovery and significance with Sakel's work in the field of biochemical treatment of schizophrenia. The technical difficulties of making full beneficial use of Sakel's method, we recognized, persisted until 1951. However, our careful study of the last 7½ years have now resolved these difficulties and hence there are no further reasons why this treatment should not be applied on a mass scale throughout the entire country.

QUESTION OF U.S. STATUS IN FIELD

You may well wonder whether the United States is actually fully equal in treatment facilities to other modern countries of the world. I know that England makes ample and systematic use of insulin treatment for schizophrenia, and that the Netherlands, Switzerland, and Austria are extremely active in this field and that Soviet Russia applies insulin treatment in a prominent place with less interest and regard to electric shock and other methods of psychological nature frequently advocated for schizophrenia.

At this point let me conclude by suggesting what can be done in a practical manner to apply what we have learned at Creedmoor to the rest of the Nation. No. 1—I would propose that the Federal Government finance a central research and teaching unit at Creedmoor State Hospital. At this center we would train physicians, nurses and technicians so that they could go forth to apply the new techniques in hospitals throughout the country. We would also continue our research programs on an expanded scale. The cost of this project would amount to approximately \$375,000 for a 3-year period.

Senator HILL. \$375,000 a year?

Dr. LAQUEUR. No.

Senator HILL. For the whole period?

Dr. LAQUEUR. Yes.

Senator HILL. For the whole period. I see.

PROPOSED PILOT PLAN

Dr. LAQUEUR. This would be the pilot plan for a proposed national program which should be instituted simultaneously.

I propose that the Federal Government make available during the next 3-year period a sum of \$5 million to finance 14 training stations distributed in such a manner as to provide proper geographical coverage for the entire country. Wherever possible these would be located at existing insulin units of which there are approximately 90 in various parts of the country. Among the university centers which I would suggest as principal training centers are the University of California at Berkeley, Tulane University in New Orleans, University of Chicago and Columbia University in New York. I have with me detailed figures as to the costs of this proposal which I would be happy to submit to the committee together with a map which I have prepared for this purpose.

Senator HILL. We would like to have those.

Dr. LAQUEUR. Thank you, sir.

Senator HILL. Very much.

LEADERSHIP OF COMMITTEE

Dr. LAQUEUR. I am fully aware that this committee has taken the leadership on many occasions in our national effort to eradicate diseases of mankind. This is without question the most serious mental illness and one which has been neglected in the past. Now that we have clear scientific evidence of a method which we know can be successful in treating the hundreds of thousands of schizophrenics who are deteriorating in our mental hospitals there is no longer any valid reason for lack of action. The \$51½ million which we have proposed for a national program to meet this problem is but a small investment when you consider the great potential both in the savings of money and, more important, the preservation of our human resources.

Senator HILL. Doctor, have you or Mrs. Gimbel had any opportunity to discuss this matter with the Public Health officials?

Dr. LAQUEUR. I have been called to this—I think between Saturday and today I heard about it, so——

Senator HILL. I mean your proposals here. You have been thinking about them for some time, have you not?

Dr. LAQUEUR. I have been thinking about it for some time and I have discussed it with the local officials in our State but not on a national scale.

Senator HILL. I wondered if you had any opportunity to talk about your proposal with the officials of the National Institute on Mental Health.

Mrs. GIMBEL. We have not as yet. I do believe they know about the program because they all attended both the international conference in New York and they attended the Psychiatric Association meeting in Philadelphia and because of the New York Times article and also an article in the Medical News; and I am sorry, I would like to leave it with the committee, sir, if I may.

Senator HILL. Very happy to have it for the use of the committee.

Mrs. GIMBEL. They do know about this and Dr. Laqueur's clinic is very well known now. This more extensive program I think they don't know about because we have just been working on this on this scale in the last week. They were interested in the clinic. We would be glad to talk over this with anybody suggested in greater detail. I know the time is short. We make it tight to save the time. So that any time we are ready to come again and stay, whatever meets the convenience of the committee.

Senator HILL. Thank you, Mrs. Gimbel. We appreciate your and Dr. Laqueur's appearance here. You brought us some very interesting testimony here, which was most interesting and you may be assured that you certainly have our earnest consideration.

Mrs. GIMBEL. Thank you very, very much. We are grateful to you and hope you will let us go on helping in any way we can on this serious problem. We thank you for what you have done.

Senator HILL. Very fine. Thank you.

Mrs. GIMBEL. Thank you very much.

Senator HILL. Now, Mr. Bookbinder.

AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS

STATEMENT OF HYMAN H. BOOKBINDER, LEGISLATIVE
REPRESENTATIVE

PREPARED STATEMENT

MR. BOOKBINDER. Mr. Chairman, thank you very much for making these arrangements for being present today.

I have given the clerk a copy of our formal statement, which I would like to have entered in the record.

SENATOR HILL. All right, sir. We will have that appear in full in the record.

(The statement referred to follows:)

My name is Hyman H. Bookbinder. In my capacity as legislative representative, I am today representing the AFL-CIO in making recommendations to the subcommittee in connection with the proposed budget for fiscal 1960 for the Department of Labor and the Department of Health, Education, and Welfare.

Before listing the specific recommendations, I should like to comment briefly on the proposed budget as a whole.

In our judgment, the President has placed the goal of a balanced budget ahead of the general welfare of the American people. His recommendations for the labor and welfare activities of the Federal Government fail to recognize the increased responsibilities which fall upon the Federal Government in light of growing population, changing technology, unsolved health problems, and unfilled needs of our people in many areas.

American labor is just as zealous as any other group in society in its desire to eliminate unnecessary Government expenditures. Such expenditures sooner or later must be paid for out of taxes, and the great bulk of such taxes come out of the pay envelopes of working people or are added to the cost of things they buy. But American labor believes the Congress and the administration have a clear responsibility to "promote the general welfare"—and it is willing to pay its fair share in providing the taxes needed to carry out that responsibility.

Earlier this year, the AFL-CIO executive council adopted a resolution on "Budget and Taxation" in which it expressed concern over the fact that President Eisenhower had chosen to make the question of "spending" the chief issue between himself and the Congress. After noting that the President has firmly opposed even a small deviation from the expenditure limitations in his budget message, the council resolution declares:

"In its effort to advance the public welfare, the AFL-CIO has been in the forefront of the fight for constructive programs to meet such unsolved problems as housing, education, depressed areas, and community facilities. These are the programs against which the President is throwing the full weight of his office.

"American workers are just as concerned as any other group of Americans about the soundness of the Federal Government's finances. They are also concerned about decent housing for themselves, improved education for their children, necessary public facilities for the growing towns in which they live, and the importance of a continuing expanding economy for all.

"They feel that on these issues the Federal Government as well as the State and local governments have a very specific responsibility to be responsive to these important social needs. American workers are quite willing to contribute their fair share of taxes to pay for these governmental undertakings, but they are not willing to be deprived of these Government programs simply on the plea that they might mean a small increase in Government spending."

Your subcommittee, Mr. Chairman, does not of course deal with all of the areas covered by this council statement, but it does have the major responsibility for the programs affecting the working conditions, health, education, and welfare of all Americans. Under your leadership, this subcommittee has time and time again revealed that it understands better than the Budget Bureau what are America's true needs. We are confident that again this subcommittee will not hesitate to go beyond the President's recommendations where the need has been demonstrated.

Year after year, the AFL-CIO has come before you with its recommendations for expansions of numerous programs. We do not intend this year to repeat all of these recommendations. In the pages that follow, there will be found some selected programs in which we have a very special interest or which cry out for support even though they may not be directly related to problems of workers as such. Failure to mention other programs by no means should be interpreted as lack of support or interest.

NEW PROGRAMS FOR BUREAU OF LABOR STANDARDS

The AFL-CIO appeared before appropriate committees of the last Congress to support the enactment of additional safeguards in the Longshoremen's and Harbor Workers' Act and the passage of a welfare and pension plans disclosure law. We are deeply gratified that on both matters Congress did enact appropriate legislation.

The AFL-CIO is also deeply gratified that administration of these measures has been assigned to the Bureau of Labor Standards with whom it has long worked closely and in whose experience and competence it has confidence.

Greater safeguards for maritime workers

The Bureau is seeking \$417,000 in the 1960 budget to carry out its new functions under amendment to the Longshoremen's and Harbor Workers' Act and we strongly urge your support for this request.

Longshoring is today the most hazardous occupation in which to make a living. Coal mining and logging once vied for that unenviable first place but they have since improved their safety record and stevedoring has not. Its injury frequency rate for 1956, the last year for which figures are available from the Bureau of Labor Statistics, was 88.5 disabling injuries per million man-hours worked—seven times the rate for manufacturing.

The Bureau of Labor Standards has made a start even without additional funds to administer this desperately needed act. It has already drafted a proposed ship repair code and sent it to interested parties for comment. As one of the interested parties we have worked closely with the Bureau and will continue to provide its engineers with the experience of the International Brotherhood of Longshoremen, the machinists, the boilermakers and the maritime and metal trades departments of the AFL-CIO. We understand the Bureau will shortly circulate a stevedoring code for similar comment revision, public hearings, and final promulgation by the Secretary of Labor.

Unless funds for enforcement are provided, however, completion of the code-making process, like the enactment of law, will not save a single life. The Bureau must have sufficient funds to establish and man field offices in the major ports around the country. Personnel must be equipped and trained to move fast. Unlike a factory which is available for inspection at any time, the ship on which either longshoring or repair is being done, stays in one port for only a few days or a week. If inspections are not made and corrections obtained at once, they cannot be made at all.

After years of efforts, Congress has at last given the maritime workers a safety law. We hope that your committee will not deny them its benefits by refusing funds for its administration.

Disclosure of welfare and pension plan information

As your committee is aware, Mr. Chairman, the AFL-CIO has long urged disclosure of information on welfare and pension plans not only to safeguard the interests of beneficiaries but also to satisfy a legitimate public and consumer interest in the honesty, integrity, and efficiency with which these plans are administered.

The law as passed by the last Congress is inadequate, but is a step in the right direction. If this act is to have any usefulness, however, the Bureau of Labor Standards must have adequate resources at its command to file, process, and make information on these plans available to beneficiaries and the public.

Again the Bureau moved even without additional funds to develop forms as authorized by law for reporting plan descriptions and annual financial transactions. Again it consulted with interested parties of which the AFL-CIO was one. We, therefore, are in a position to urge favorable action by your committee in granting the \$445,000 in the 1960 budget for staffing this operation.

The act calls for disclosure of welfare and pension information in a public documents room of the Department of Labor. We trust that appropriate ma-

chinery will be developed so that the information can be readily available to all persons with a legitimate interest, regardless of residence.

The second service which can and should be rendered is to provide information which is not available today. No one knows how many plans there are, estimates range from 250,000 to 1,250,000. No one knows how many workers are covered, what benefits they receive, or how much money has been contributed or accumulated in the funds or what funds are invested in. We believe the budgetary amounts requested should permit the compilation and analysis of exceedingly useful information of this kind.

BUREAU OF LABOR STATISTICS

Collective-bargaining data

We believe the proposed budget for the Division of Wages and Industrial Relations is not adequate to do the job that is necessary in the field of collective bargaining information.

Federal public policy is to encourage and aid collective bargaining. This policy is reflected in the Labor-Management Relations Act (Taft-Hartley) and the extensive activities of the National Labor Relations Board in requiring certain ground rules in labor-management relations. It underlies the work of the Federal Mediation and Conciliation Service in aiding settlement of bargaining disputes.

The Government could substantially aid in assuring mature and peaceful bargaining relations by furnishing factual information for the use of labor and management negotiators. But the Government has been providing little more than token aid in this vital area even though a modest investment can yield significant returns in more intelligent and harmonious collective bargaining.

The limited information on collective bargaining practices which has been provided by the Bureau of Labor Statistics through its Wages and Industrial Relations Division has often been a constructive aid. It has been regarded as reliable and acceptable by both labor and management and, therefore, has often helped to narrow the area of conflict and put bargaining on a factual basis.

But the flow of information on collective bargaining has been skimpy and erratic. The program in this field has shrunk over the years at the same time that collective bargaining has spread and the need for factual guidance has grown vastly.

The program has simply failed to keep abreast of the times, either in terms of amount, frequency, or timeliness of data needed. Collective bargaining is so dynamic that a study of practices only several years old is already obsolete and worse than useless today, because it generates disagreements over the amount of change since the study date. Irregularity and lack of continuity of work in this field greatly hampers its usefulness.

Back in 1947-50, for example, the Bureau issued a series of bulletins (Bulletin 908 series) on different types of bargaining agreement clauses. Despite the evident great demand for and usefulness of that work, and despite the marked changes in the decade since which have made that material outdated, no funds have been provided to prepare similar useful guides for current needs.

The Bureau has also sought from time to time to establish an annual factbook to provide current data on prevalence and trends in bargaining matters. Funds should now be provided for this effort to provide data on a continuing and up-to-date basis so that labor and management could expect and use it as regularly as they now rely on such regular BLS series as that on earnings and hours and prices.

We regret that the administration has failed to provide for the necessary expansion of this activity in 1960. We hope your committee will see fit to appropriate more than the \$1,200,000 requested. We strongly urge a budget sufficient to provide a regular and timely flow of current information, particularly in the areas of such rapid change as in health and welfare benefits, pensions, vacations, holidays, and adjustment to changing technology.

Productivity

We are in an era of radical technological change but have grossly inadequate factual exploration of the effects and the likely impact in the years ahead. The Productivity Division of BLS should be provided with funds to enable examination of individual industries and of the economy generally to determine (1) how adjustment to automation and other major technological advances in proceeding and (2) to determine areas of major impact in coming years, what industries are stepping up orders for and use of new automatic equipment.

City workers' family budget

Last year we called to the attention of the subcommittee the need to reprice the city workers' family budget.

The BLS has expressed the hope to have the pricing done for 20 cities during the next fiscal year. We are glad to note some progress in the project, but we must express our disappointment that this very valuable tool still is not available for use in collective bargaining, in discussions of tax policy, minimum wage legislation, and other uses. We trust that the funds requested will be approved and that they will be adequate to complete the job without further delay.

WAGE-HOUR AND PUBLIC CONTRACTS

Year after year we have been appearing before the Congress asking for larger appropriations for the Wage-Hour and Public Contracts Division. We have done this because of the very simple and incontrovertible fact that every dollar spent for enforcement of these laws means several dollars in restored wages. The Division is doing a good job with the money available to it. We have no quarrel with the Division; its staff is conscientious and efficient. But it cannot do the necessary job with the level of appropriations which the administration has requested.

The administration's pennypinching appropriations is at the expense of thousands of low-paid workers being chiseled out of the \$1 minimum wage or the overtime provisions of the law. The official estimates of underpayment have been set at \$80 million annually, but the Division is able to locate only about one-fourth of this amount, and to collect even less than this.

It is a disgraceful and inexcusable thing that our lowest paid workers must be deprived of at least \$60 million a year because unconscionable employers are able to escape detection by the Federal Government as a result of inadequate inspections.

We urge the Congress to appropriate at least the additional \$876,000 which the Division requested but was rejected by the Budget Bureau. This would permit the hiring of 100 additional investigators.

MEXICAN FARM LABOR PROGRAM

The record of the House hearings has revealed again that the pennypinching of the Bureau of the Budget will be paid for by the lowest paid workers. In reply to a question put by the chairman, the Director of the Bureau of Employment Security revealed that the Bureau's request for \$1,227,700 for compliance activities in the Mexican farm labor program was cut by \$350,000. As a result, only \$873,000 is being requested by the President.

We will not here repeat our concern about the horrible conditions still prevailing in this program—to the detriment of both the Mexican workers and to the domestic farm laborers. The testimony already given to the House subcommittee is the most eloquent documentation of our concern. According to the information furnished at the request of the chairman, the \$350,000 not allowed by the Budget Bureau means that the Department of Labor will, in the fiscal year 1960, make 13,000 fewer housing inspections; 20,000 fewer contract terminations at the site of employment; 8,000 fewer payroll audits; 400 fewer feeding installation inspections.

In addition, the Labor Department statement indicates, the extra 48 employees which the \$350,000 would have permitted, "would also be working on job preference for domestic agriculture workers, analyzing payrolls to determine adverse effect on domestic workers, provide technical assistance in making wage surveys, evaluate program effectiveness in the field, and determine that policies are uniformly carried out in all regions."

The AFL-CIO most urgently requests the Congress to appropriate at least the funds determined by the operating agency to be necessary to carry out Public Law 78 adequately.

HEALTH, EDUCATION, AND WELFARE

Before commenting on a few specific programs in the jurisdiction of the Department of Health, Education, and Welfare, I want to state that the budget requests generally for the Department are most disturbing. Numerous programs, some costing very little money, have been arbitrarily cut.

The budget-balancing preoccupation of the administration is most cruelly demonstrated in its failure to request the extra \$5 million authorized by Congress

for such programs as maternal and child welfare, crippled children's services, and child welfare services. Again, inadequate funds are proposed for the rural library services. We are happy to note that the House made improvements in some of these programs, and we are hopeful that the Senate will do even better.

The AFL-CIO supports these programs, as well as all other education, health, and welfare activities authorized by the Congress. We will not burden the record with any detailed statement of our support, in the knowledge that the record will be adequately made by the many public organizations working so hard in each of the fields involved.

PUBLIC HEALTH

We share the concern expressed by Dr. Howard A. Rusk, distinguished medical reporter for the New York Times, in his comments on the President's recommendations in the field of health:

"It is significant that in his budget proposals for 1960, the President has proposed such drastic reductions in Federal grants for construction of hospitals and research facilities and has proposed no increase for medical research. It is disturbing that in doing so, no attempt was made to analyze the key factors of national interest and explain the logic in terms of the national interest underlying this decision."

At a recent meeting of the executive council of the AFL-CIO, a statement was adopted on health and medical care, in which the Congress was urged to—

"Appropriate adequate funds to meet this Nation's responsibilities in medical research.—We agree with the assumption of the Secretary's (of HEW) consultants on medical research and education that 'the expansion of medical research and education required in the national interest will be costly and should not be restricted by lack of funds,' and take grave note of the consultants' statement that they 'believe it conservative to project total national medical research expenditures of \$900 million to \$1 billion per year by 1970' * * *. This would mean tripling present expenditures. Yet the administration's budget proposes no increase in Federal appropriations for research—surely a step backward in the context of rising costs, rather than the bold step forward that is needed if we are to reduce needless human suffering and anguish.

"Increase the appropriations to the hospital and medical facilities construction program to the maximum levels authorized in the basic legislation.—The proposed decrease of \$151,142,000 in grants for construction of medical schools, hospitals, and other health facilities comes at a time when the need for new and expanded medical schools is acute, and in the face of a Department of Health, Education, and Welfare report that the broad purpose of the Hill-Burton Hospital and Medical Facilities Act to provide the necessary physical facilities for furnishing adequate hospital, clinic, and similar services to all their people has by no means been carried out, that 'adequate facilities of many kinds are still lacking if a high quality of medical care is to be provided for all the people. While the excellent work accomplished under the Hill-Burton Act has helped to meet the need for additional beds due to population increases, the real gain in reducing total backlog has been minor.' "

It was most gratifying to the AFL-CIO to find that the House subcommittee, then the full Appropriations Committee, and then the House itself refused to be bound by the inadequate recommendations of the Budget Bureau for the Public Health Service.

The additional \$42,500,000 voted by the House for hospital construction will permit this program—which so deservedly carries the name of the distinguished chairman of this subcommittee, Mr. Lister Hill—to come somewhat closer to meeting the great unfilled needs of our communities in building adequate hospital space. Welcome as this increase is, we urge the Senate to raise the appropriation to at least the level for the current year, \$186,200,000.

The House very commendably increased the President's proposals for the National Institutes of Health by \$50 million. This will permit a level of operations very close to that originally requested by the Institutes but which was inexcusably and inexplicably rejected by the Budget Bureau.

Similarly, the House action in adding \$10 million to grants for construction of research facilities will contribute toward balanced progress in our health activities.

Waste treatment facilities

Testimony by the Secretary of Health, Education, and Welfare has shown that the Budget Bureau reduced the Department's request for treatment of waste materials from the present level of \$45 million down to \$25 million even though pending requests are more than the former figure.

What is the point of Congress passing enabling legislation if the administration fails to request and make plans for the expenditure of adequate funds to carry out the will of Congress? The President has indicated his desire to turn this function over to the States, but until the Congress approves of this proposal, it is incumbent upon the administration and the Congress to implement the program.

We call upon the Senate to accept the action of the House in restoring the appropriation for this crucial program to the present level of \$45 million.

Health services for migratory farmworkers

The many thousands of low-income families who follow the crops and provide the Nation with food and fiber certainly deserve increased services which they now so grievously lack. The House hearings on Public Health Service reveal on pages 919 to 922 that the Department of Health, Education, and Welfare made a request for \$100,000 for agricultural migratory health activities that was not allowed by the Bureau of the Budget. The Department's own justification of the request appears in the printed document. We urge your committee to supply the proposed funds just as we support other measures which would give much-needed assistance to one of the most underprivileged groups in our population.

Foreign quarantine

The AFL-CIO Maritime Trades Department has made a study of the Government's program to prevent the importation of communicable diseases. It is persuaded that the interstate carrier general sanitation program is completely ineffective because of the insufficient number of inspectors available, only 20 at the present time. HEW's testimony indicated that the Budget Bureau had cut \$165,000 from the Department's request of foreign quarantine activities, a cut that means a reduction of 30 employees who would have been used to strengthen the inspectional staff on the Mexican and Great Lakes areas, and for some increase in airport inspection.

We endorse the recommendation of our maritime trades department that the Congress double the \$360,000 now in the budget for this important activity.

OFFICE OF EDUCATION

Defense education funds

The AFL-CIO is aware of the efforts which have been exercised by numerous of its affiliates in conjunction with industry associations and the American Vocational Association, in an effort to get the Office of Education to redirect its regulations on title VIII of the National Defense Education Act of 1958, so as to carry out the spirit and intent of that act as set forth in its "Section 801: Statement of Findings and Purpose."

The combined efforts of these interested organizations have failed to bring about the desired relief. The regulations issued by the Office of Education to the States continue to interpret title VIII of the act so as to preclude the use of funds made available under this title for the continued training of apprentices and the acquisition of needed additional skills and knowledge by journeymen in defense related fields.

We understand that our interested affiliated organizations, the contractors' associations and the vocational association have presented, under date of May 7, a joint statement of their position on this matter to the chairman and each member of his subcommittee. They have suggested that a proviso be inserted in the appropriations bill to assure that the funds made available for grants to States for area vocational education programs would be available for related instruction for apprentices and for journeymen in areas not otherwise adequately served and in any industry, including the construction industry in fields necessary for the national defense, in accordance with the stated purposes set forth in the National Defense Education Act.

The AFL-CIO joins in and endorses this joint statement and request presented to the members of this appropriations subcommittee by its interested affiliated organizations and the other organizations concerned.

We respectfully urge that the subcommittee include such an amendment which would clearly enunciate the purposes of title VIII and give direction to the Office of Education in properly carrying out these purposes.

Increases in education programs

The AFL-CIO is gratified at the action of the House in increasing the funds for vocational education, library services, payments to school districts, and assistance for school construction. We urge the Senate to approve at least the amounts voted by the House.

PUBLIC ASSISTANCE

We strongly support the minor additions to administrative costs of public assistance which are included in the administration request. Administrative expenses are a very small part of total expenditures, and it would be poor economy not to give the Bureau of Public Assistance the 15 additional positions already approved by the House to work on cost and quality of medical care and the direct training of public welfare personnel.

It is even more important to provide sums for research and demonstration projects and the training of professional workers in public assistance. The House failed to provide any money for these purposes. Such appropriations were authorized by Congress in the 1956 amendments. So far as we have been able to ascertain, all the professional groups with an intimate knowledge of operating problems of public assistance support the system of Federal grants that has been proposed. The American Public Welfare Association and the National Association of Social Workers have made their own statements in support. We join with them in urging that the law not continue to be merely words on the statute books.

The administration request for \$1 million for the training of public welfare personnel and \$700,000 for cooperative research grants and demonstration projects is well below the amounts authorized or the amounts which the administration requested for the 1958 budget. We would prefer larger sums, but at least a start should be made in providing funds that will bring large returns by increasing our understanding of the causes of dependency and by helping to supply trained persons who can assist families that have encountered bad luck again to become self-supporting.

APPROPRIATIONS AND EMPLOYMENT

The AFL-CIO supports the various activities involved in these hearings because it is convinced that each of these means protection of the general welfare. It is appropriate to point out, however, that the major cutbacks proposed by the administration would also affect employment opportunities for thousands of workers. Time after time, witnesses defending the budget, have indicated that there were arbitrary cuts made in all construction proposals. We have cited above the reductions in programs for hospital construction, medical research facilities, waste treatment works, etc.

With unemployment so heavy in the construction industry, and with steel and other basic industries operating at low levels, the Federal Government should speed up, rather than slow down, needed construction. By putting people back to work, and thus speeding general recovery, the Government would soon recoup its extra outlays through increased revenues that result from stepped-up economic activity.

Thus, we urge the Congress to increase those programs where the need has been demonstrated, without blind concern for budget balancing, and thereby add to the health and welfare of Americans, on the one hand, and provide needed jobs for unemployed Americans, on the other.

INADEQUACY OF BUDGET REQUEST

Mr. BOOKBINDER. Because of your crowded schedule I will take even less time than usual to summarize just a few of our recommendations, Mr. Chairman.

Senator HILL. All right, sir.

Mr. BOOKBINDER. In the opening of our statement we make our general presentation in the context of the current great debate that is tak-

ing place and I want to elaborate. I just want to say very, very briefly that we believe in the AFL-CIO that there are more important things in this world than balancing the budget, even though we would like to see the budget balanced. And among the most important things in the world are the things that this subcommittee is doing and doing so well under your leadership.

Now we have year after year, Mr. Chairman, a period here and our testimony, I suppose can be summed up in one word. That word is "more." But we do that without embarrassment, without hesitation, because we feel all along that more has been needed to carry out these activities.

I will not burden the record with all of the places where we think the current budget requests are inadequate.

I do want to point out two or three areas in the Labor Department where we feel that your committee might take another good hard look and embark upon a substantial increase in the level of operations.

WAGES AND COLLECTIVE BARGAINING

In the Bureau of Labor Statistics there is an activity called wages and collective bargaining. In the last years almost all emphasis has been placed on expanding and improving the work in the area of wages with relatively little done to bring collective bargaining data up to date. More and more the country is realizing that the conflicts in collective bargaining can be and should be ironed out primarily on the basis of facts. The Bureau of Labor Statistics we regret to say has not given this particular activity the kind of emphasis the economic situation of the country has warranted, and we trust that before long, this year, preferably, we hope a substantial increase can be made in the level of appropriations.

WAGES AND HOURS DIVISION

Now, I will not give you the details except to say in one sentence that again we are dismayed at the level of appropriations for the Wage and Hour Division. Again, the records of the Wage and Hour Division show that there is a substantial amount of unconscionable chiseling of these very low wages for the lowest paid people in the country. With the record of violations as high as it is we do not see why the administration continues to keep the operation at the present level. Some \$80 million, it is estimated now, gets lost because of inadequate enforcement.

Now, in the area we know so very close to your heart, Mr. Chairman, the area of public health, we are delighted, of course, that the House has seen fit to add substantially to the level of appropriations suggested by the administration. When reading the budget message some months back, we were as surprised and disturbed as I guess you were to find that the administration seemed to be taking great credit for itself for the several-fold increase in the level of appropriations, but the budget message fails to point out that these increases are the result of congressional action, not the result of administration proposals.

Once again the administration is asking that you stand pat, and to stand pat at this time means to go backward because of the increased

cost of hospital construction, increased cost of medical research, and so on.

We have every reason to feel confident, Mr. Chairman, that this committee will again do what it has done so magnificently in the past and not be bound by the inadequate recommendation of the administration.

The House has made an excellent start on this, and we would not object to having you up the House a little bit further.

HOSPITAL CONSTRUCTION

In the case of hospital construction, it is, of course, very pleasing to see that this program which carries your name and which you have every reason to be mighty proud of, this program on behalf of the operator is on somewhat of a higher level due to the action of the House.

Mr. Chairman, I am accompanied today, I guess, by now seven or eight men who are not sitting with me but I want you to know they are present to give me moral backing for my endorsement of a matter which I understand has already been called to your attention and to the attention of the other members of this committee.

DISCRIMINATION UNDER DEFENSE EDUCATION ACT

The Department of Health, Education, and Welfare, it appears, is carrying out a part of the Defense Education Act in such a way that we believe is discriminatory to the training of important crafts. In our statement on page 9 you will find a more detailed statement.

I appear today primarily to say that the AFL-CIO endorses the suggestion which has been made that a proviso be inserted in the appropriations bill which would assure that the fund made available for grants to States for the area of vocational education programs would be available for related instruction for apprentices and for journeymen in areas not otherwise adequately served and in any industry including the construction industry in fields necessary for the national defense in accordance with the stated purposes set forth in the National Defense Education Act.

This position which we endorse, Mr. Chairman, is a position which has been taken by all of the unions involved, by the metal trades department of the AFL-CIO, by the employer associations in these industries, and also by the American Vocational Association, and we hope, Mr. Chairman, that you will find it possible somehow to correct the situation which we believe is rather serious.

RESEARCH GRANTS FOR PUBLIC ASSISTANCE

I want only to point to one other area of the many that we include in this statement. We do not understand why for the third year in a row now there appears to be difficulty in appropriating the rather tiny funds involved, a million or \$2 million for research grants in the area of public assistance, research and demonstration projects, and for the training of public welfare personnel. We are talking about a program that costs billions of dollars. Just to put this on a dollar-for-dollar basis it is inconceivable to us that this small investment of

a million or \$2 million or \$3 million a year would not soon more than pay back the Federal Government because of the reduced cost of public assistance that would result from the findings of these projects.

We recommend most heartily, Mr. Chairman, that your committee do permit the Department to start these projects. Let us see for a year or two whether they are not producing the results that are claimed for them. It is a small enough investment. And we ought to satisfy our needs in this particular area.

These highlight our recommendations to you, Mr. Chairman, and I would be glad to expand on any of these that you may wish to have me do so. If you have any questions on that defense education area we have a man sitting here in the room.

Senator HILL. We appreciate your testimony very much.

As you have suggested, we have had some other good testimony which sustains and supports the different positions which you have taken. We have some good testimony. But we are certainly very happy indeed to have your testimony here today, too.

We thank you very, very much.

Mr. BOOKBINDER. Thank you very much.

Senator HILL. We certainly appreciate it.

Thank you, sir.

Senator HILL. Now, Mr. Ferebee, Department of Health, Education, and Welfare.

PREPARED STATEMENT

I have before me a letter from Dr. Don W. Russell, director of the Arkansas State Board for Vocational Education, the Vocational Rehabilitation Service, and I shall place his statement in the record at this point.

(The letter referred to follows:)

ARKANSAS STATE BOARD FOR VOCATIONAL EDUCATION,
VOCATIONAL REHABILITATION SERVICE,
Little Rock, May 19, 1959.

HON. LISTER HILL,
*Chairman, Committee on Appropriations,
Senate Office Building, Washington, D.C.*

DEAR SENATOR HILL: If it is permissible, I would like to file a written statement with the Senate Committee on Appropriations relating to section 4(a) (1) of the budget for the Office of Vocational Rehabilitation in the Department of Health, Education, and Welfare.

This relates to the effort being made to establish a comprehensive Rehabilitation Center at the Army-Navy Hospital in Hot Springs, Ark. The statement, with attachments, gives the background to the studies which have been made and a specific request for Federal assistance in financing the Center.

I am sure that both Senator McClellan and Senator Fulbright have talked with you about this. I thought it would be best if you had some official statement from the Arkansas Rehabilitation Service in your committee files.

Sincerely yours,

DON W. RUSSELL, *Director.*

Senator HILL. It deals with this matter of the establishment of a comprehensive rehabilitation center at the Army-Navy Hospital in Hot Springs, Ark.

I am sure this matter has been brought to the attention of the Bureau of Rehabilitation.

Will you advise us as to the position of the Bureau on this matter?

OFFICE OF VOCATIONAL REHABILITATION

STATEMENT OF E. E. FEREBEE, DEPUTY DIRECTOR, ACCOMPANIED
BY RUSSELL J. N. DEAN, ASSISTANT TO THE DIRECTOR; AND
ROBERT W. BROWN, ACTING BUDGET OFFICER, DEPARTMENT
OF HEALTH, EDUCATION, AND WELFARE

REHABILITATION CENTER, HOT SPRINGS, ARK.

Mr. FEREBEE. Mr. Chairman, it is a pleasure to be here today. I would like to introduce Mr. Russell J. N. Dean who is an assistant to the director.

Senator HILL. Glad to have you here, Mr. Dean.

Mr. FEREBEE. Miss Switzer herself would be here were she not in Europe.

Senator HILL. She is attending the World Health Conference in Geneva.

Mr. FEREBEE. The First Mediterranean Conference on Rehabilitation in Athens, Greece. I testified last week before the Senate Committee on Government Operations regarding a bill, S. 1616, which would direct and authorize the Secretary of the Army to transfer this facility which is no longer needed by the Army to the State of Arkansas to be used as a rehabilitation facility. Mr. Russell also testified at that meeting as well as did the GSA, the Department of Interior, and a representative from the Office of the Secretary of Health, Education, and Welfare.

This proposal was originally brought to the Director's attention last year, when she visited Hot Springs, Ark., by the citizens of Hot Springs. It seemed to them and it seems to us now that it would be a lot better to have full-time use made of this facility for the disabled people of Arkansas and the southwest than let it become idle or partially idle. With one slight amendment to the proposed bill to transfer this facility we had no opposition to it.

STATE ACTION ON CENTER

The State of Arkansas has already enacted legislation to accept the facility and has appropriated \$200,000 to establish a rehabilitation facility there.

We are convinced that a large rehabilitation center is needed in the southwest area and that many disabled people could benefit from it. Letters from a number of States were introduced at that hearing which testified as to the need for a facility.

Our act permits us to help establish such a center, but establish means just that, to give supplementary assistance for a period of 3 to 5 years until the center gets on its feet. When we formulated our 1960 budget we had included nothing for this purpose and the 1960 budget as passed by the House has nothing included for it.

I think that is about all I would like to say unless you have some questions, Mr. Chairman.

Senator HILL. Well, I have before me the letter from Miss Switzer, Director of the Office of Vocational Rehabilitation to Senator McClellan under date of May 14, 1959. Would you contemplate help to this

facility under the basic rehabilitation act such as you are giving to other facilities?

Mr. FEREBEE. We would. As I say we have included nothing in the budget for this facility. The supplementary assistance required by this center is quite a large amount for the first several years and our grants average only \$27,000 per grantee in our research and demonstration program which includes authority for establishing rehabilitation facilities.

Senator HILL. You mean \$27,000 to any one?

Mr. FEREBEE. That is the average grant.

Senator HILL. That would be the average?

Mr. FEREBEE. Yes.

Senator HILL. What would be perhaps the largest amount? If you do not have that figure you may supply it for the record.

QUESTION OF APPLICABLE PROVISIONS

Mr. FEREBEE. Under section 4(b) of our act of course we have a special provision on this national pilot demonstration center over in Virginia which gets a minimum of \$250,000.

Senator HILL. I appreciate that. That applies only to that facility there, does it not?

Mr. FEREBEE. That is correct.

Senator HILL. There is no other provision other than the general provision which applies to all of the States, is that right?

Mr. FEREBEE. That is correct.

Senator HILL. What would be the maximum amount which you are giving now?

Mr. FEREBEE. I would like to supply that for the record. I think it runs in excess of \$100,000, but I would like to supply accurate figures for the record.

Senator HILL. Yes. You might supply the maximum amount that you are making in grants and you might also supply the minimum amount that you are making, and you say the average is about \$27,000?

Mr. FEREBEE. The average runs \$27,000. Some run less and some run more. But the average is \$27,000 for research and demonstration projects as a whole.

LETTER FROM MISS SWITZER

Senator HILL. I notice in Miss Switzer's letter to Senator McClellan on date of May 14, she makes this statement:

We recognize that, through the Federal-State program of support for vocational rehabilitation, we are providing partial assistance for the rehabilitation of disabled persons through our basic grant program

that is the program we have been speaking of

and do not believe that this subsidy should be duplicated on a permanent basis by an additional subsidy to a rehabilitation facility providing such services.

In other words, the thought there is that——

Mr. FEREBEE. On a permanent basis it should be only supplementary assistance. Our act does authorize us in one section—section 4(a) (1)—to help establish facilities in addition to our basic grants to

the States, but the whole implication and the definition of establishment means for a short period of time to give that supplementary assistance until the facility gets on its feet and is able to finance itself through our regular grant program plus workmen's compensation, private payments, and so forth. We would like to see this center set up on a sound financial basis for the long run if it is established. We think with the interest in it, the chances are good for it to make a success. We think a facility is needed, and we would like to see a comprehensive facility established in the Southwest.

SIZE OF GRANTS

Senator HILL. How do your figures run in terms of grants for this, what we might call, this establishment period?

Mr. FEREBEE. Well, the biggest one of course is in accordance with a special provision in our act—section 4(b).

Senator HILL. That is a very special case out there.

Mr. FEREBEE. I think the State of Minnesota in 1 year did get something over \$100,000 for an establishment of a center. The act authorized grants and puts no dollar limitation on it. But in an item such as this we just do not have the funds in next year's budget without crippling our regular research program. We do not have funds included. We did not anticipate this at the time, and there is nothing in the budget for it.

Senator HILL. I wish you would correct the record pretty carefully and advise us for the record the largest amount that you have given for this, what we might call this establishment period, what is the smallest amount you have given for this purpose and what would prove to be the average amount that you have given.

Mr. FEREBEE. We shall be glad to do that, sir.

Senator HILL. I will put Miss Switzer's letter in the record in full, of course, and the information you will furnish, and as I said, Mr. Russell's statement.

(The information referred to follows:)

ESTABLISHMENT OF REGIONAL FACILITIES

Of the 238 projects approved and activated since the initiation of the research and demonstration grants program, only three have been for the establishment of special or regional facilities to provide vocational rehabilitation services to three or more States similar to that proposed for the Arkansas project. They are as follows:

Minneapolis Society for the Blind, 1936 Lyndale Avenue, South, Minneapolis, Minn.: This was a 1-year project for which fiscal year 1956 funds in the amount of \$142,365 were awarded for the remodeling and expansion of the physical facilities of the Minneapolis Society for the Blind in order to establish a regional facility to provide adjustment, training, and workshop services to blind persons from a number of States.

Rehabilitation Institute of Chicago, 401 East Ohio Street, Chicago, Ill.: This was a 1-year project initiated in fiscal year 1958 for which aggregate funds in the amount of \$53,849 were awarded for the remodeling or alteration of a part of the physical plant of the Rehabilitation Institute of Chicago and for the purchase of some light shop equipment in order to establish a regional facility to serve the needs of amputees and other disabled from a number of States who require specialized prosthetic services.

University of Pennsylvania School of Auxiliary Medical Services, Philadelphia, Pa.: A 1-year project for which fiscal year 1958 funds were awarded in the amount of \$26,116 for the alteration of existing facilities in order to establish a regional facility to provide evaluation and vocational (prevocational) services to disabled persons from three States.

The average grant for the establishment of these three facilities was slightly in excess of \$74,000. This average, however, has very little meaning in view of the small number of centers the establishment of which has been partially financed by Federal funds to date.

STATEMENT OF DON W. RUSSELL

My name is Don W. Russell. I am director of the rehabilitation service of the Arkansas State Board for Vocational Education and, for the past 17 years, have held this position and other professional positions in the agency. The Arkansas Rehabilitation Service is designated by State law as the agency having the legal responsibility for administering the State-Federal program of vocational rehabilitation.

My purpose in offering a written statement to the committee is to present a specific plan of action whereby the Army-Navy Hospital in Hot Springs, Ark., may be converted into a comprehensive medical-vocationally oriented regional rehabilitation center for the rehabilitation of disabled civilians.

This plan—

(1) Is in line with existing policies of the Federal Government in assisting in the rehabilitation of the disabled,

(2) Can be financed under existing Federal legislation,

(3) Will partially fill the existing gap in rehabilitation services to the disabled, and

(4) Will result in the full utilization of the Army-Navy hospital.

The following two attachments are submitted along with the written statement:

Attachment A : Survey committee report.

Attachment B : Report by the Arkansas Rehabilitation Service.

The program of vocational rehabilitation, initiated by Congress in 1920, has been broadened and expanded by the passage of Public Law 113 of the 78th Congress and Public Law 565 of the 83d Congress. Despite an excellent record, rehabilitation is still an infant social program, highly restrictive in nature. Many gaps remain between the need for services and the availability of services. Those who know something of the problems inherent in disability and its resulting handicaps recognize the vast chasm between the needs of the unserved and partially served, and the maximum services which can be provided under existing legislation unless more adequate facilities and financing are made available.

Today's greatest need for serving the disabled lies in two areas:

First, in establishing centers and other supporting facilities where comprehensive rehabilitation programs for the severely disabled may be initiated and carried out in a coordinated, concentrated manner; and

Second, in providing increased Federal financing for the operation of such centers and facilities in a State which recognizes the need and is willing to participate financially in earning the Federal funds.

The need for establishing and operating comprehensive rehabilitation centers and facilities has been recognized at all levels of Government and has tremendous support from private agencies, organizations and the lay public.

The Congress, through enactment of Public Law 482 of 1954, the Medical Facilities Survey and Construction (Hill-Burton) Act has provided funds to the States to survey the need for such facilities and to assist in the construction of those facilities needed. Ten million dollars annually is presently being appropriated for construction of comprehensive facilities under this act. Public Law 565 of 1954 (Vocational Rehabilitation Act) makes funds available to State rehabilitation agencies for serving the disabled which may include the purchase of equipment and initial staffing of such facilities. S. 772 by Senator Hill, H.R. 1119 by Mr. Fogarty, and H.R. 3465 by Mr. Elliott, proposes additional Federal legislation to help meet the need for rehabilitation facilities. This legislation would establish a rehabilitation facility program in the Office of Vocational Rehabilitation and provide Federal financial assistance to the States to help them establish a variety of rehabilitation facilities.

The States' vocational rehabilitation council, made up of State directors of vocational rehabilitation, reports that the largest unmet need for rehabilitation services lies in the area which requires comprehensive centers. The National Rehabilitation Association, an organization composed of some 16,000 persons who are interested in the disabled, is actively supporting a legislative program designed to expand the facility program. A committee of this association has approved the proposal which I am presenting to you.

The experiences of the Arkansas Rehabilitation Service give further evidence of the need for such a center. Arkansas has been cited as having one of the best programs of rehabilitation in the Nation. The program operates under a comprehensive State Rehabilitation Act with a base as broad as existing Federal legislation. State appropriations are sufficient to match all presently available Federal vocational rehabilitation funds. During the fiscal year of 1959 the Arkansas agency will rank, at, or near, the top in the Nation in per capita expenditures for rehabilitation and its approximately 2,200 rehabilitants will be in excess of its proportionate share of the national goal of 200,000 rehabilitants annually which was established at the time of the enactment of Public Law 565 by the 83d Congress. Despite these advances and achievements, we are not prepared to serve effectively many hundreds of disabled persons who are in urgent need of rehabilitation services and who can be served effectively if appropriate facilities were available. The Arkansas agency can provide services to only limited numbers of the mentally ill, emotionally disturbed, mentally retarded, alcoholics, those with severe orthopedic and neurological disabilities, and those whose condition precludes any other than sheltered workshop or home industry opportunities.

The Army-Navy Hospital is a modern, well kept, 500-bed military hospital in a good state of preservation. It consists of 36 buildings on a tract of 25.42 acres. The principal building is a nine-story brick, fire-resistant structure. There is a secondary building of three and one-half stories designed as quarters for nurses, with living capacity for 100 persons. There are 34 remaining buildings of residence, barracks, and various auxiliary types. (See attachment A for a more detailed description.)

The Department of the Army, for a number of years, has desired to close the Army-Navy Hospital, and the Secretary of the Army and the Surgeon General have reemphasized their desire to follow this course of action in their testimony this year. For the past 4 years the Congress has required the Army to operate the facility as a military hospital. According to testimony, the Department of Defense is spending almost \$2 million annually in keeping the hospital open. I am told that the facility is serving fewer than 50 patients daily and usually less than half this number. It seems a great waste for this facility to remain idle, or near idle, when it could be used to its fullest extent for the purpose of restoring handicapped persons to lives of usefulness, and, in many instances productivity, particularly when it would only take approximately half of the amount of Federal funds now required to keep it open on a more or less standby basis.

S. 1616, by Senator McClellan, and H.R. 6190, by Congressman Norrell, are identical bills relating to the transfer of the Army-Navy Hospital to the State of Arkansas for use as a vocational rehabilitation center. This proposed legislation is the result of discussions between top level personnel of the Departments of Army, Interior, Health, Education, and Welfare, and the General Services Administration and meet the approval of these agencies.

About 2 years ago certain individuals in Arkansas and at the national level became interested in the full use of this facility as a comprehensive rehabilitation center which would serve primarily the disabled of the south and southwest regions of the country but would be available for use by the entire Nation. In addition, they believed it could be developed into a research and demonstration center for study of and experimentation to determine new and better means of serving the disabled. As a result of this interest, the Office of Vocational Rehabilitation provided a grant to make a survey of the Army-Navy Hospital facility to determine its suitability for the proposed purpose. A committee selected from nationally and regionally known experts in the field of rehabilitation, and of officials of the Arkansas Rehabilitation Service, was designated to make this survey and study. This committee was headed by Dr. Frank Krusen of Mayo Clinic and included Frank O. Birdsall of the Fishersville, Va., Rehabilitation Center, James Burrows of the New York Institute for the Crippled and Disabled, Herbert Carleton of the North Georgia State Trade School, and Gerald Clore of the Dallas Goodwill Industries in addition to persons from the Dallas regional office of the Department of Health, Education, and Welfare, and the Arkansas Rehabilitation Service.

Late in 1958 the committee made the proposed survey and on December 5, 1958, published a report of its finds. This report is included as attachment A.

The Arkansas Rehabilitation Service, on the basis of this committee survey and report, has carried on a rather intensive study to determine the type of

center which could be developed, including the services which would be provided, the number of persons who could be served, and the cost of establishment and operation of the center. This is included as attachment B. With this as a necessary background, let me now present you with some detailed information on the specific plan which is proposed for the Army-Navy Hospital facility.

Primarily, the proposed rehabilitation center would be vocationally oriented, but its scope would be much more comprehensive than that of a vocational rehabilitation facility. It is believed that the following services may be offered in the proposed center :

MEDICAL

Physical and medical evaluation	Speech therapy
Medical consultation	Audiological service
Psychiatric screening	Recreational therapy
Medical supervision	Nursing
Physical therapy	Prosthetics
Occupational therapy	

PSYCHOLOGICAL

Psychological evaluation	Group therapy
Personal adjustment counseling	

SOCIAL

Social evaluation	Social group work
Social casework	Recreation, nonmedical

VOCATIONAL

Vocational evaluation	Vocational training
Vocational counseling	Sheltered employment
Prevocational experience	Placement
Speech education	

In addition, we propose to operate a combination workshop-home industry program with the Hot Springs facility as its center. We know that many severely handicapped persons not capable of engaging in competitive business, industry, or trade activities can be productive if they are placed in the proper setting and provided with training, tools, equipment, and supervision appropriate to their abilities. There would also be comprehensive instruction in what is commonly called independent living. There are many severely disabled individuals who are so badly handicapped as to have no recognizable vocational possibilities but most of these are in need of services which will allow them to care for their own needs. Some of these persons now being cared for in homes require the constant care of another family member; some in institutions are a financial burden on their families or, in most instances, the State. It is believed that the proposed facility could provide services which would make many of these people independent in taking care of their daily needs of living.

It is anticipated that at normal full operating capacity a total of 550 to 600 persons can be served at any one time in the basic or core rehabilitation center. In addition, approximately 60 to 100 persons will be regularly employed in the rehabilitation workshops with work evaluations and training in the sheltered workshops available to an additional 50 at one time. The persons actually employed in the rehabilitation workshops would be earning a wage and, in all probability, living outside the center. The clients will probably be distributed as follows:

Evaluations only-----	30
Vocational training only-----	300
Vocational training and medical services-----	60
Medical services only-----	60
Work evaluation and personal adjustment training-----	100
Total-----	550
Workers employed in workshop-----	75
Total-----	625

The average length of stay in the center should be approximately 6 months, thus, about 1,250 will be served annually. The table below indicates the average length of stay for each type of client and the number to be served in a year :

	Number at a time	Length of stay (months)	Number served (year)
Evaluation only.....	30	2	180
Vocational training only.....	300	9	400
Vocational training and medical services.....	60	9	75
Medical services only.....	60	3	240
Work evaluation and personal adjustment.....	100	3	400
Total.....			1,295

During the first year of operation it is not anticipated that the center would operate at full capacity. This is due to the fact that some time would be required for conveying the property to the State, the making of necessary alterations and repairs to fit the buildings for rehabilitation needs, and the purchase and installation of needed equipment. It is estimated that clients would be accepted at the center during the last 8 months of the year and that capacity during the year would average about 50 percent of full capacity.

BUDGET ESTIMATE, HOT SPRINGS REHABILITATION CENTER

General operations

I. Administration :	
(a) Salaries (14 persons).....	\$56,100
(b) Telephone, office supplies, printing, insurance, travel.....	26,500
II. Student services :	
(a) Medical services (43 full time, 2 part time, plus doctors in major fields on a consultative basis).....	198,860
(b) Guidance and student services (15 persons).....	68,340
(c) Vocational training and evaluation (45 persons).....	188,700
(d) Sheltered workshops services (5 persons).....	25,200
III. Maintenance and operations :	
(a) Salaries (71 persons including student labor and temporary employees when needed in any department).....	191,880
(b) Food, medical supplies, expendable supplies and equipment, utilities, maintenance of elevator and laundry.....	461,800
Total operational budget.....	1,217,380

Alterations, repairs, and equipment

(a) Alterations and repairs.....	\$150,000
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	With Army- Navy equip- ment	Without Army-Navy equipment
B. Equipment:		
Office equipment.....	\$5,000	\$25,000
Medical services.....	10,000	45,000
Vocational training and evaluation.....	210,000	350,000
General maintenance (living quarters, kitchen, motor transportation, etc.).....	10,000	120,000
Sheltered Workshops.....	10,000	10,000
Total.....	245,000	550,000

It will be noted that the estimated cost of general operations for a full year at full capacity is estimated to be approximately \$1,200,000. Since, during the first year, the center will only operate at approximately 50 percent capacity for a period of 8 months, the cost of general operations would be approximately \$425,000. The cost of alterations and repairs and equipment will probably be needed in the full amount, a total of some \$400,000. For the first year of opera-

tion, therefore, funds in the amount of \$825,000 would be required. The State of Arkansas has appropriated \$200,000, leaving a balance of \$625,000. It is anticipated that from one hundred to one hundred twenty-five thousand dollars may be obtained from Hill-Burton rehabilitation facility funds to finance the alterations and repairs. This would leave a balance of \$500,000 which would be needed from the Federal Office of Vocational Rehabilitation. It is felt that this is a reasonable estimate for the first year of operations.

State rehabilitation agencies are already using all available funds in operating present programs, and any expansion of services makes mandatory a corresponding increase in funds to purchase or provide additional services. A regional rehabilitation center must be considered as a necessary expansion of the rehabilitation program of the Nation, and additional Federal funds over and above those provided for the present program will be necessary for a period of years, 5 years as a minimum, before an adequate program of financing can be developed by the State and Federal Governments. A center can no more become entirely self-supporting than can the existing rehabilitation program, and the availability of Federal funds is the base of all proposed operations at a center, with State funds as a contributing factor.

Arkansas is willing to assist in the financing of the center and make the services available to the disabled of the region and Nation. The General Assembly of the State of Arkansas has appropriated \$200,000 of additional State funds annually to match Federal funds for the establishment and operation of the proposed center. Actually, therefore, the State of Arkansas is proposing that additional Federal funds be made available to the State, that the State will provide the matching money required, and that the disabled of Arkansas, the region, and the Nation will be served.

The proposed center has State, regional, and National implications. Facilities for providing comprehensive services to the disabled are inadequate in all sections of the Nation. Small centers and facilities are needed in most States; however, it is professionally and economically unsound to attempt the establishment of a comprehensive center in each State. There is urgent need to establish a few regional centers which are large enough to meet all the needs of the disabled in the areas of medical, psychological, social, and vocational evaluation and services. The establishment of one such center would serve as a pilot project for other regions or sections of the country.

There is still much unknown about disability, its implications to the individual, and the best means of overcoming the disability from a vocational standpoint. Much research, experimentation, and demonstration needs to be done. The present budget for the Office of Vocational Rehabilitation provides for \$4½ million annually in research, demonstration, and training. This is evident that you and the Office of Vocational Rehabilitation place a high value on the need for research, experimentation, and demonstration.

Rehabilitation is a long, hard road for many thousands of severely disabled persons who require a comprehensive, integrated program of medical, psychological, social, and vocational evaluations and services if they are to be escorted along the road to successful rehabilitation. The establishment of this center would be another major milestone in the development of a real program of services to meet the need of the disabled.

ATTACHMENT A

COMMITTEE REPORT

A PROPOSAL TO CONVERT THE ARMY-NAVY HOSPITAL, HOT SPRINGS, ARK., INTO A COMPREHENSIVE REHABILITATION CENTER, INCLUDING RESEARCH AND DEMONSTRATION ACTIVITIES OF NATIONAL SCOPE, INTEREST, AND IMPORTANCE

FOREWORD

The Department of the Army for a number of years has been considering the advisability of closing the Army-Navy Hospital in Hot Springs, Ark., and declaring the property surplus. There has been much discussion as to best possible use which could be made of the facility should it be closed. During the past few years some 25 agencies of Government have inspected the facility to determine its suitability for their specific use. As yet, no area of service has been found for which the facility is considered ideally suited.

Considerable interest has been manifested on a National, State, and local level in a proposal to convert the facility into a comprehensive rehabilitation center.

The proposed center would render specifically designated services to disabled and also provide for continuous research and demonstration projects in the general field of rehabilitation which are of national concern, interest, and importance.

In order to assure a detailed knowledge and understanding of the existing facility, its suitability for a rehabilitation center, and to determine the existing needs for a national research and demonstration center, the Arkansas Vocational Rehabilitation Service made application to the Office of Vocational Rehabilitation, Department of Health, Education, and Welfare, for a grant to finance a study. The application was approved by the National Advisory Council to the Office of Vocational Rehabilitation and a grant was made. The purposes of the study project are twofold:

A. Relating to the Army-Navy Hospital:

(1) To explore the use that could be made of the facility, taking into consideration such matters as scope of services to be rendered, disability categories to be served, coverage of agencies (public and voluntary), etc.

(2) To evaluate the physical plant of the Army-Navy Hospital to determine its suitability for use as a rehabilitation center. This would involve such matters as location, structure, need for adaptations, cost of maintenance, etc.

B. Relating to national scope:

(1) To develop and demonstrate a methodology to be used in studying the need for a comprehensive rehabilitation facility in any given geographical area.

(2) To demonstrate a regionwide plan to evaluate the nature and adequacy of present and potential facilities for meeting the needs of severely disabled individuals.

This first report is concerned only with that portion of the study relating to the Army-Navy Hospital. A study committee was appointed by the Arkansas Vocational Rehabilitation Service with the advice and counsel of the Office of Vocational Rehabilitation (see p. 17 for a list of the committee members). This committee met on October 27-29, 1958, inspected the facility, and held several discussion conferences. This report reflects the thinking of the committee.

INTRODUCTION

During the past 50 years, particularly since the beginning of World War II, we have learned the importance of utilizing all available manpower in order to maintain our economy at maximum capacity. Disability is a problem of very great magnitude in our society: it takes many thousands of workers away from productive activities so that they become a great financial burden on the productive efforts of others. We are told that approximately three-quarters of a billion dollars is spent annually in public assistance grants as the results of neglected disability. Rehabilitation, therefore, becomes necessary so that the greatest possible number of our citizens can become productive, self-supporting workers, rather than be supported by public assistance, other income-maintenance programs, or families and friends. The national grant-in-aid program of vocational rehabilitation was initiated by Federal legislation in 1921. Its progress has been slow but steady. During the past 10 years, in particular, the program has been expanded to serve a greater and greater number of disabled people, but even now only about one-third of the number disabled annually is being served. The need for immediate additional expansion is urgent.

Arkansas has provided some measure of rehabilitation services to its disabled citizens since 1923. The program, as in all States, has been limited in scope, and somewhat slow in developing. In recent years—particularly during the past 4 years—the growth and development of the program in Arkansas has been phenomenal. During the fiscal year ending June 30, 1958, the Arkansas agency ranked third in the Nation in the number of persons rehabilitated when considered on a population basis. The agency expects to rehabilitate 2,400 disabled persons during the present fiscal year and, if this is accomplished, will rank first. The Arkansas agency is also one of the best financed in the Nation when considered on a population basis or on a population per capita income basis. During the present fiscal year the agency will have available for expenditure on disabled persons a little more than \$1 per capita. The national average is approximately 42 cents per capita.

The need for facilities

A comprehensive rehabilitation center is an important asset in developing modern programs for rehabilitation of the severely disabled. In such a facility the total skills of all the helping professions can be brought to bear on the problems of the handicapped. In the rehabilitation center the handicapped individual is physically retrained to develop strength and tolerance. He is vocationally trained so that he will have a skill for sale to an employer. At the same time social and psychological services are available. For those who cannot go immediately to private employment, rehabilitation workshops may be available. Such facilities practice the most modern techniques of rehabilitation and can conduct research and experimentation to make services still more effective.

A few fairly comprehensive rehabilitation centers have been established in the United States. They are located primarily in the East, the North, and the extreme western part of the country, but nowhere in the south-central part of the United States is there a comprehensive center for all disability groups which provides all rehabilitation services, including vocational training. Such a center is urgently needed. It is not feasible for each State to establish a thoroughly comprehensive rehabilitation center, although some States are establishing smaller facilities which can provide one or two of the needed services. It is the belief of the committee, therefore, that a really comprehensive center, serving a rather large geographical area, could employ better trained, more experienced personnel who would render a better and more varied service at a cost far less than would be required in purchasing needed services in different facilities which offer only a portion of the services which may be needed by the severely disabled individual.

Need for a research orientated center

There is a great need also for a comprehensive rehabilitation center which can be used on a national basis for research and demonstration purposes. An urgent need in the national program today is for more well-planned research projects on rehabilitation problems that confront the State agencies of vocational rehabilitation. There is as yet, no rehabilitation center in the country which has status as a research and demonstration center for problems resulting from disability. There is particular need to develop such a research center where demonstration and experimentation can be carried on in a practical setting. Such projects can best be carried on in a comprehensive rehabilitation center.

Such a research orientated rehabilitation center should be operated by a State agency of vocational rehabilitation so that a partnership can be entered into between the State and Federal Offices of Vocational Rehabilitation. Such partnership would provide a place where the Federal Office of Vocational Rehabilitation can initiate research or demonstration projects to be carried on under its close supervision. The need for such a national center for research, experimentation, and demonstration is a compelling factor in justifying the establishment of a comprehensive national rehabilitation center and in justifying substantial Federal financial support for the undertaking.

It is quite possible that within the near future Congress will enact legislation dealing with diagnostic evaluation services, those services which would result in independent living, and an expanded program of workshop activities. There must, of necessity, be a great deal of research and experimentation done in these areas, particularly the first two. If not, there is likely to be a considerable waste of time and money in developing sound and progressive programs in these areas.

THE ARMY-NAVY HOSPITAL

The physical plant of the Army-Navy Hospital, Hot Springs, Ark., is well kept and in good state of preservation. The entire plant—exclusive of the lake-shore facility on Lake Hamilton, leased from the U.S. Department of the Interior, and the residence of the Superintendent of Hot Springs National Park—consists of 25.42 acres and 36 buildings.

The facility offers a wonderful opportunity for the establishment of a comprehensive rehabilitation center. There is adequate space for the development of a comprehensive program of services in all areas of need as indicated by the needs of disabled individuals themselves. Ample room is available for expansion; yet the facility is not so large but that a modest program can be initiated which will effectively use the buildings and, at the same time, provide for economical and practical utilization of the plant.

The 36 buildings are as follows:

(a) The principal building is a nine-story structure which was designed as a 500-bed hospital. This building would be well suited for administrative offices and rooms for physical and occupational therapy, psychological testing, counseling, instructional classrooms, vocational training shops, mess-halls, kitchens and living quarters for wheelchair cases, and other severely disabled persons.

(b) There is a 3½ story nurses quarters with a capacity of 100 persons. The building has supporting kitchen, dining room, parlor, laundry, etc. This building could be used for residential quarters for clients who are less severely disabled.

(c) There are 21 apartments of permanent construction which could be used for rental to personnel of the center.

(d) There are barracks—2 of permanent construction and 8 of frame construction—with a capacity of 371 persons. These barracks could be used for housing personnel or clients, or could be used as vocational training shops, or for classrooms.

(e) There is one two-story residence which could be used for staff living quarters.

(f) There is a powerplant with room in the building for two maintenance shops. This could be used as it is presently being used.

(g) There are twelve one-, two-, or three-story buildings which could be used for vocational training shops, classrooms, sheltered workshops, maintenance shops, or storage.

(h) There are three greenhouses and one tool shed. These could be used for training in florist work.

(i) Additional buildings include a large lumber shed and 11 parking garages with a total capacity for 43 cars. There is also an outdoor swimming pool with dressing rooms available.

There is a lakeshore facility on Lake Hamilton with a large lodge, six cabins, a boat dock, and a shelter picnic area. This is leased to the Army-Navy Hospital by the U.S. Department of Interior.

There is a large residence on the southeast part of the main plot which is reserved by the U.S. Department of Interior and now used as the home of the superintendent of the Hot Springs National Park.

The Army-Navy Hospital has much equipment which would be suitable for use in a rehabilitation center, such as physical therapy and occupational therapy equipment, medical laboratories, kitchen and dining-room equipment, beds, linens, blankets, maintenance tools, motor vehicles, recreational equipment, and office equipment such as desks, chairs, filing cabinets, etc.

The existing buildings would require little or no physical change in converting to a rehabilitation center.

THE PROPOSED REHABILITATION CENTER

The proposed facility would be a comprehensive medical and vocationally orientated center. The basic conventional center would be supplemented by special projects for single disability groups such as the mentally ill, mentally retarded, cerebral palsied, epileptic, etc. There would be special forms of adjustment training and diagnosis for special disability groups. Industrial workshops would constitute a portion of the total project. All this would be rounded out by an ambitious program of research, demonstration, and experimentation. This program, together with the services of the center in the training of professional rehabilitation workers, makes its establishment a matter of national interest and concern.

Core rehabilitation center

This would consist of four principal departments:

(a) Medical services.

(b) Vocational services.

(c) Social adjustment services.

(d) Work evaluation and personal adjustment training.

Medical services.—The Medical Services Department would provide basic services of medical evaluation and supervision, physical therapy, occupational therapy, speech therapy, etc. An infirmary of from 30 to 50 beds would be maintained for those individuals who need active nursing care. Most of the clients, however, would be housed in the main building or in dormitories where they

would take care of their own needs without the assistance of nurses or medical attendants. The Medical Services Department will emphasize the provision of physical training to build up physical tolerance and develop muscles, strength, and coordination, and the fitting and training in the use of prosthesis. It is not anticipated that the Medical Services Department would perform any surgical procedures. If such are found to be needed, recommendations will be made to the referring physician and such surgical procedures will be done by the physician of the client's choice in privately operated hospitals.

The medical staff would consist of a limited number of doctors, employed on a full- or part-time basis, supplemented by specialists who would be available on a consultation basis. The remaining medical services staff would consist of physical therapists, occupational therapists, speech therapists, prosthetists, nurses, student trainees, aids, and attendants.

If the Federal Congress enacts legislation to extend medical rehabilitation services to persons who are capable only of independent living, the Medical Services Department could handle a large number of these individuals. In this eventuality it might be necessary to increase the number of beds in the infirmary and to employ additional nurses. Such legislation would place great demands upon the facility for service, not only for Arkansas citizens, but for those of surrounding States. The purpose of such independent living services would be to enable a disabled individual to take care of himself in a home situation to the extent that another person would not longer be required to care for him and thus would, themselves, be free to enter the labor market. In the development and carrying out this new program of services it seems imperative that much research, demonstration, and experimentation be done to develop a sound and economical program. The same Federal legislation proposes to establish a new area of diagnostic services for all disabled in an effort to determine the services needed. A center such as this would also serve a very useful purpose in this area of work.

Vocational services.—The Vocational Services Department would provide high quality vocational evaluation as well as training in some 20 or more trades or vocations in which handicapped persons could most easily find employment. Such trades would be selected after a careful survey of the industrial needs of the Southwest area and the Nation as a whole. The following are typical of those often provided for handicapped persons: Commercial courses, watch and clock repairing, radio and television repair, shoe repair, cooking and baking, beauty culture, barbering, tailoring and sewing, janitor, waitress, maid, practical nursing and nurses aid, drafting, auto mechanics, auto body work, furniture refinishing and repair, metalwork, upholstery, air conditioning and refrigeration, carpentry, woodworking, general mechanics, horticulture (greenhouse work). There is ample space in the facility so that training could be provided for 400 or more trainees.

Social adjustment services.—The Social Adjustment Services Department would employ psychologists, psychiatrists, social workers, counselors, and recreational workers. It would provide services related to student-personnel activities, guidance and counseling, various recreational and social adjustment programs. Along with the Medical Services and Vocational Services staff it would play a prominent part in all diagnostic and evaluation activities, whether at the beginning of the client's program or during its execution.

Work evaluation and personal adjustment training.—The Work Evaluation and Personal Adjustment Training Department would operate workshops and other work activities in which clients would be evaluated for employment in a practical work situation and trained in the development of acceptable work habits, and in the development of motivation for work. These shops would be particularly useful for those cases—of which the mentally ill, mentally retarded, and the epileptic are good examples—where the handicap arises not so much from physical disability as from the social and emotional factors which destroy one's motivation for work or for his adjustment to work.

Research, demonstration, and experimentation

An important part of the total project would be research, demonstration, and experimentation in problems of rehabilitation which have national interest and concern. There is an urgent nationwide need for more well-planned research projects on rehabilitation problems which are under close supervision of the Federal Office of Vocational Rehabilitation. It is proposed, therefore, that a Research Department be established to carry on special projects of national

concern which are proposed by the National Advisory Council to the Federal Office of Vocational Rehabilitation. These projects will be designed to seek the solution to rehabilitation problems which are common to all or many of the State rehabilitation agencies. The facilities for research should be excellent; a Research Department, a competent interdisciplinary staff, a varied caseload of all disability groups, and an effective service program. It is anticipated that the center would become the principal research facility whereby the Office of Vocational Rehabilitation could carry on or sponsor research and demonstration projects in which it and other States are most interested.

ANTICIPATED CASELOAD AND COST

The facility would probably not operate at full capacity during the first year and perhaps during the first 2 years. There is reason to believe that client population at the center could be built up to about 200 within the first 6 to 9 months. There is also reason to expect that enrollment would reach 400 prior to the end of 2 years. The ultimate capacity of the center would probably be about 600 clients; however, the actual enrollment would depend upon the kind of programs developed and the amount of financial support accorded the center. Maximum development also depends upon the extent to which the workshop and work activities are developed.

Minimum remodeling will be needed but provision should be made for a few projects. For example, heat and other utilities must be installed in three buildings located across Reserve Avenue from the main portion of the facility. Ramps must be constructed at some entrances to the building, and in certain areas new sidewalks, or possibly elevated walkways, should be constructed in order to reduce the steep grade which now exists between some of the buildings. Certain alterations must be made inside the buildings; however, these should not be done in advance but after the program gets into operation. It is estimated that a maximum of \$50,000 per year for each of the first 3 years might be required for alterations in the physical plant.

It is difficult to estimate the cost of equipment without knowing how much of the present hospital's equipment would be left with the facility. Most of the hospital equipment—such as beds, mattresses, linens, dining room and kitchen equipment, X-ray, laboratory, and therapy equipment, automotive equipment, office furniture and machines—can all be used perfectly in the rehabilitation center. It is recommended that all the present equipment at the facility should be declared surplus along with the hospital. The Arkansas Vocational Rehabilitation Service should determine those relatively few items which cannot be used in a rehabilitation center.

The major cost for equipment would be in connection with the vocational rehabilitation training classes. The equipment for these classes is estimated to cost about \$350,000, although this figure could be smaller if shop equipment can be obtained through the surplus property program. If the present equipment of the hospital is not declared surplus, it would probably require as much as \$150,000 additional for equipping other than vocational classes, available over a 3-year period.

CONCLUSIONS

(1) Facilities for providing comprehensive services to the disabled are inadequate in all sections of the Nation. The development of a progressive program of rehabilitation designed to eliminate and/or reduce the ill effects of disability is dependent upon the establishment of additional facilities to serve the many thousands of severely disabled who cannot be served through conventional methods and to better serve other thousands who are now receiving only limited services.

(2) Small centers and facilities are needed in most States and these are being established in many places. It is professionally and economically unsound, however, to attempt the establishment of a comprehensive center in each State.

(3) There is urgent need to establish a few regional centers which are large enough to meet all the needs of the disabled in the areas of medical, psycho-

logical, social, and vocational evaluation and services. The establishment of one such center, with Federal-State participation, would serve as a pilot project. The smaller centers in the States within the regional area could intensify their efforts to one or two areas of service and the two types of centers could, thereby, complement each other.

(4) There is still much unknown about disability, its implications to the individual, and the best means and methods of overcoming the disability from a vocational standpoint. Much research, experimentation, and demonstration needs to be done. From an economic, as well as a professional and practical viewpoint, such activities should be directed by professionally trained staff. This cannot be done in small centers or by persons without knowledge and skills in research methods and techniques. There is urgent need for a technically trained research department to carry on or supervise research activities in rehabilitation. This can best be done by establishing such a department in a comprehensive rehabilitation center.

(5) The physical plant and equipment of the Army-Navy Hospital in Hot Springs are well suited for use as a comprehensive rehabilitation center. Conversion can be made at a very low cost. If the facility is declared surplus, a facility would thereby be available which would require millions of dollars to construct at present prices. Every effort should be made to utilize the facility to the best advantage.

(6) Arkansas has a vigorous and balanced program of rehabilitation. The State has surpassed others in the provision of funds and the rendering of services when considered on a population per capita income basis. The State agency has the philosophy and concept necessary to the successful administration of a comprehensive center.

RECOMMENDATIONS

We recommend:

(1) The establishment of a comprehensive rehabilitation center—including a research department—at the Army-Navy Hospital, Hot Springs, should the facility be declared surplus.

(2) The center be afforded Federal rehabilitation grants to—

(a) Purchase equipment over a period not to exceed 3 to 5 years.

(b) Provide funds to staff and service a research department.

(c) Provide additional funds, to be matched by the State, for operation of the center. These would be in addition to the funds presently available to the State under Public Law 565.

(3) The Arkansas Vocational Rehabilitation Service administers and operates the center, accepting disabled clients on a nationwide basis.

MEMBERS OF SURVEY COMMITTEE

Birdsall, Frank O., Woodrow Wilson Rehabilitation Center, Fishersville, Va.
Bryan, Ralph, Architect, U.S. Public Health Service, Department of Health, Education and Welfare, Dallas, Tex.

Burrows, James, Institute for the Crippled and Disabled, 400 First Avenue, New York.

Carleton, Herbert, North Georgia State Trade School, Clarkesville, Ga.

Clore, Gerald, executive director, Goodwill Industries, 2511 Elm Street, Dallas, Tex.

Krusen, Frank, M.D., Mayo Clinic, Rochester, Minn.

Little, Curtis O., supervisor of technical services, Arkansas Vocational Rehabilitation Service, Little Rock, Ark.

Russell, Don W., director, Arkansas Vocational Rehabilitation Service, Little Rock, Ark.

Spratt, Eugene C., director, regional hospitals, State health department, Little Rock, Ark.

Thomas, Robert E., associate regional representative, Office of Vocational Rehabilitation, Department of Health, Education, and Welfare, Dallas, Tex.

ATTACHMENT B

BUDGET JUSTIFICATION AND PRINCIPLES RELATING TO OPERATION OF COMPREHENSIVE REHABILITATION CENTER AT ARMY-NAVY HOSPITAL, HOT SPRINGS, ARK.

STATEMENT OF PRINCIPLES GOVERNING THE ESTABLISHMENT OF A COMPREHENSIVE REHABILITATION CENTER AT THE ARMY-NAVY HOSPITAL IN HOT SPRINGS, ARK.

I. NEED FOR COMPREHENSIVE REHABILITATION CENTER

(a) It is an accepted fact that facilities for providing comprehensive services to the disabled are inadequate in all sections of the Nation. It is just as much an accepted fact that there are sufficient numbers of disabled who need center services to merit the establishment of additional facilities.

(b) Arkansas has recognized this deficiency in the operation of its expanded program of services and realizes that the development of a progressive program of rehabilitation is dependent upon the establishment of additional facilities to serve those who cannot be served through conventional methods and to better serve those who are now receiving only limited services.

(c) Small centers and facilities are needed in most States. It is professionally and economically unsound, however, to attempt the establishment of a comprehensive center in each State.

(d) There is urgent need to establish a few large centers—perhaps of a regional scope—to meet the needs of the disabled in the areas of medical, psychological, social and vocational evaluation, and services. Smaller centers in each State could intensify their efforts in one or two areas of service and the two types of centers would thereby complement and supplement each other.

II. USE OF ARMY-NAVY HOSPITAL FACILITY AS A COMPREHENSIVE REHABILITATION CENTER

(a) *Scope of Arkansas' rehabilitation program*

Arkansas has a vigorous and balanced program of rehabilitation. The State has surpassed others in the provision of funds and the rendering of services when considered on a population per-capita income basis. The agency has the philosophy and concept necessary to the successful operation of a comprehensive rehabilitation center and the State is willing to participate financially with the Federal Government in the establishment and operation of a center.

(b) *Army-Navy Hospital facility*

The physical plant and equipment of the Army-Navy Hospital in Hot Springs are well suited for use as a comprehensive rehabilitation center and conversion can be made at a low cost. If the facility is declared surplus by the Department of Defense it would be good public policy and beneficial to both the Nation and the regional and State rehabilitation programs if the facility were continued in active use to serve the disabled as a comprehensive rehabilitation center rather than to be placed on a standby basis. The total plant and all equipment should be made available to the Rehabilitation Service of the State of Arkansas for use as a comprehensive rehabilitation center. Such Federal legislation as is required to effectuate this principle should be enacted.

III. SERVICE PROGRAM OF THE CENTER

(a) The center at Hot Springs would complement and supplement the facilities available in rehabilitation centers in other neighboring States in the region and would not impede the development of other necessary rehabilitation facilities in any State in the region or in the Nation.

(b) The center would be developed on a sound service program basis to serve the needs of Arkansas, other neighboring States in the region, and other States in the Nation. Full development will be effectuated as rapidly as is possible, with a possibility of sharing, at the outset, of unused parts of the facility with other health and service agencies.

(c) Service program of center: The center will be developed on the basis of its use as a comprehensive rehabilitation center to serve disabled persons in Arkansas, the other States in the region, and other States in the Nation. The

center would serve the disabled both on an inpatient and an outpatient basis and would include, as a part of the total program, work evaluation units and a sheltered workshop program.

(d) Research and demonstration projects will be carried on at the center—

(1) On the initiative of the Arkansas Rehabilitation Service;

(2) In cooperation with other agencies and institutions within the State;

(3) In cooperation with agencies and institutions of other States within the region; and

(4) In cooperation with the National Advisory Council on Vocational Rehabilitation.

These could be initiated either by the State agency or the Council but would require approval by the Council so that section 4(a) (1) funds could be used.

IV. FINANCING THE CENTER

(a) Experience has proved that the vast majority of the disabled persons requiring services available at a comprehensive rehabilitation center are clients of a rehabilitation agency. In all probability no more than 5 to 10 percent of the persons to be served will be financially able to pay for the services or be clients of insurance companies, labor unions, etc.

(b) The Arkansas Rehabilitation Service—as are the agencies in most other States—is already using all available funds in operating its present program, which does not include the provision of comprehensive center services to many clients. Any expansion of services, therefore, makes mandatory a corresponding increase in funds with which to purchase or provide the additional services.

(c) Financing of the rehabilitation center must be considered as a necessary expansion of regular program services and additional Federal funds made available to Arkansas—on a matching basis—for such expansion. It is not to be considered as a special project with diminishing Federal financial support on the theory that it can become self-supporting since self-support can only be achieved through availability of additional Federal funds to purchase or provide needed case services. The center can no more become self-supporting than can the existing rehabilitation program. Availability of Federal funds is the base for all program operations.

Such Federal legislation as is required to effectuate this principle—for Arkansas or any other State in similar circumstances—should be enacted.

(d) The center would serve clients of rehabilitation agencies from other States in the region and the Nation. Per diem costs should be kept as low as possible so as to encourage and permit center use by other State rehabilitation agencies. The Arkansas agency, therefore, should be granted a more liberal percentage in the matching of Federal funds than is permitted under present Federal law. The percentage of State matching funds required should be 10 to 15 percent. Arkansas is ready to appropriate an additional \$200,000 annually and thereby have a minimum of \$250,000 in State funds to earn additional Federal funds for the operation of the center.

BUDGET JUSTIFICATION

GENERAL OPERATION

Service programs

The center is to be a facility to render comprehensive evaluation and services—medical, psychological, social, and vocational—to the disabled and all disability groups. It is not anticipated that disabled persons will be brought to the center immediately after their accident or disease but will be admitted only after their medical condition is no longer acute.

The center will provide services which are not presently available to the disabled. Just as important, however, it will supplement the services now being provided to severely disabled groups in existing small facilities. As an example, Arkansas is presently operating a small rehabilitation center for the mentally ill, in which 60 clients are housed at one time. Adequate psychiatric, psychological, and social evaluations and services are provided as well as adequate vocational evaluation. The vocational training services are extremely limited, however, and must be obtained elsewhere, and adequate funds for providing the training, maintenance, and other services related to training are not available to the agency. It is anticipated that our center for the mentally ill can work with a minimum of 200 annually but to do so will require additional facilities

and funds where vocational training may be provided as well as a continuation of psychiatric, psychological and social services on a decreasing basis. In Arkansas the same is true of our existing rehabilitation facilities in serving clients at the tuberculosis sanatoriums, the mentally retarded colony, the boys' and girls' training schools, and to serve the emotionally disturbed. Rehabilitation clients from these facilities could be rendered the additional services required on a comprehensive basis at the new center.

If the Federal Congress and the several States enact legislation and make appropriations to provide rehabilitation services to persons who are capable only of independent living, the facilities and staff of the center will require strengthening. In this event the figures for the center would undergo some change and the number of staff members in relation to client population would increase, and the center would no longer aim at an inclusive operating cost of under \$10 per client day.

A program of sheltered workshop operations is included in the center plans. This would involve the actual operation of a sheltered workshop for Hot Springs and vicinity as well as using the workshop facilities in work evaluation and training of persons from other areas in these activities. As far as Arkansas is concerned, the rehabilitation service is presently proceeding with plans for the establishment of a series of sheltered workshops throughout the State in cities with a population in excess of 25,000. Local communities are to participate financially and in the management of the workshop program. The center facilities would be available for evaluation and training of individuals to be employed in these workshops in Arkansas and other States. It is also our belief that a home industry program cannot be successfully operated for the severely disabled except as it is a part of an overall sheltered workshop program. Evaluation and training in this area would be a part of center operations.

Caseload

It is anticipated that at normal full operating capacity a total of 550 to 600 persons can be served at any one time in the basic core rehabilitation center. In addition, approximately 60 to 100 persons will be regularly employed in the rehabilitation workshops with work evaluations and training in the sheltered workshops available to an additional 50 at one time. The persons actually employed in the rehabilitation workshops would be earning a wage and, in all probably, living outside the center. The clients will probably be distributed as follows:

Evaluations only.....	30
Vocational training only.....	300
Vocational training and medical services.....	60
Medical services only.....	60
Work evaluation and personal adjustment training.....	100
Total.....	550
Workers employed in workshop.....	75
Total.....	625

The average length of stay in the center should be approximately 6 months, thus, about 1,250 will be served annually. The table below indicates the average length of stay for each type of client and the number to be served in a year:

	Number at a time	Length of stay (months)	Number served (year)
Evaluation only.....	30	2	180
Vocational training only.....	300	9	400
Vocational training and medical services.....	60	9	75
Medical services only.....	60	3	240
Work evaluation and personal adjustment.....	100	3	400
Total.....			1,295

The first year's operation is anticipated to be approximately 75 percent of maximum capacity with the second year at near average capacity, and the third year at maximum capacity.

ALTERATIONS, REPAIRS, AND EQUIPMENT

Immediate repair is needed of the steam line between the three-story nurses' home and the nine-story main building. Heat and water lines must be installed in the buildings across Reserve Avenue. Some alterations must be completed in some of the present wards in the main building and in some of the smaller buildings to make them adaptable for vocational training rooms, shops, and other desired purposes. An adequate supply of electricity with a sufficient supply of electrical outlets must be provided as well as some plumbing adjustments. Elevated walkways or ramps should be constructed from the second and third floors of some of the buildings to reduce steep grades which now exist. Some new sidewalks need to be laid. The estimated cost of \$100,000 for the first year is for that which is considered essential for beginning operations.

Equipment.

Equipment is estimated on the basis of retaining all present equipment now used by the Army at the hospital, and an estimate on the amount of money which would be required if none of the present army equipment and furnishings is made available. This includes such items as furniture and furnishings in the nurses' quarters, the officers' quarters, apartments, barracks, etc. It also includes the motor transportation vehicles and all items presently in such shops as the electrical, carpentry, plumbing, automotive repair, etc. Also included are desks, chairs, filing cabinets, typewriters, adding machines, equipment in the kitchen, cafeteria, etc. The expense of replacing equipment, furniture, and furnishings, would be a very great amount in the event that that now used by the Army was not released to the agency.

HOT SPRINGS REHABILITATION CENTER

General operations

I. Administration :	
A. Salaries (14 persons) -----	\$56, 100
B. Telephone, office supplies, printing, insurance, travel ----	26, 500
II. Student services :	
A. Medical services (43 full time, 2 part time, plus doctors in major fields on a consultative basis) -----	198, 860
B. Guidance and student services (15 persons) -----	68, 340
C. Vocational training and evaluation (45 persons) -----	188, 700
D. Sheltered workshops services (5 persons) -----	25, 200
III. Maintenance and operations :	
A. Salaries (71 persons including student labor and tempo- rary employees when needed in any department) -----	191, 880
B. Food, medical supplies, expendable supplies and equip- ment, utilities, maintenance of elevator and laundry --	461, 800
Total operational budget -----	1, 217, 380

Alterations, repairs, and equipment

A. Alterations and repairs -----	\$150, 000
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	With Army- Navy equip- ment	Without Army-Navy equipment
B. Equipment:		
Office equipment -----	\$5, 000	\$25, 000
Medical services -----	10, 000	45, 000
Vocational training and evaluation -----	210, 000	350, 000
General maintenance (living quarters, kitchen, motor transporta- tion, etc.) -----	10, 000	120, 000
Sheltered workshops -----	10, 000	10, 000
Total -----	245, 000	550, 000

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
May 14, 1959.

HON. JOHN L. McCLELLAN,
Chairman, Committee on Government Operations,
U.S. Senate,
Washington, D.C.

DEAR SENATOR McCLELLAN: AS I told you in our telephone conversation on Wednesday of this week I regret exceedingly that I will not be able to appear personally before your committee to discuss the proposed use of the Army and Navy General Hospital facility at Hot Springs, Ark., as a State-operated rehabilitation center, in the event the Federal Government should effect transfer of this property to the State of Arkansas. I am leaving this week for the first Mediterranean conference on rehabilitation, sponsored by the International Society for the Welfare of Cripples. Mr. E. Emory Ferebee, Deputy Director of the Office of Vocational Rehabilitation, who conducted the negotiations with the Department of Defense and your staff, and who is thoroughly familiar with my views, will represent this office at your hearings on Thursday, May 21, at 10:30 a.m.

As you requested, I am conveying to you some of the views I expressed when I appeared before the House Committee on Appropriations. From my knowledge of the vocational rehabilitation program in Arkansas and surrounding States, and from the widespread interest expressed by citizens of Arkansas when I visited there last year, it seems apparent to me that the use of this facility to establish a rehabilitation center would be of great assistance in meeting the needs of the disabled people of that area. The State rehabilitation program in Arkansas is one of our more advanced programs and is devoted to improving the services provided for the disabled citizens of Arkansas. As the Secretary made clear in our official report on the bill, what this legislation seeks to accomplish is very desirable.

You have requested my views on the probable Federal requirement in connection with this project. At this stage of the Arkansas plans, it is next to impossible to accurately advise you as to what the requirements might be. We are, however, dedicated to the concept that these types of rehabilitation facilities should be established on a financially sound basis, designed over a long-term period to operate on a fee-for-service basis that will adequately cover all or most of their costs. We recognize that, through the Federal-State program of support for vocational rehabilitation, we are providing partial assistance for the rehabilitation of disabled persons through our basic grant program, and do not believe that this subsidy should be duplicated on a permanent basis by an additional subsidy to a rehabilitation facility providing such services. We do, however, recognize that in order to establish a large scale effective rehabilitation facility, it may be necessary to provide transitional subsidy assistance until it is in full operation. We have not yet received, nor is it timely for us to have received, a complete and detailed operating plan for this facility, and therefore are not in a position to determine what the precise transitional subsidy requirements might be. However, the order of magnitude of such subsidy would appear to range between \$300,000 and \$500,000 in the partial year of operation which would be possible in 1960.

I appreciate your interest in the vocational rehabilitation program.

Sincerely yours,

MARY E. SWITZER, *Director.*

SURVEY OF PROPOSED FACILITY

Senator HILL. Now do you have anything else that you might suggest adding?

Mr. FEREBEE. I presume Mr. Russell gave you a copy of a survey made of that facility.

Senator HILL. State that again will you, Mr. Ferebee?

Mr. FEREBEE. I presume Mr. Russell sent you a copy of a survey made by a committee of that facility in which it makes certain recommendations. If he did not, I would like to leave one with you.

Senator HILL. Yes. This is a—

Mr. FEREBEE. Committee report.

Senator HILL. Yes. We have it here. The committee report, a proposal to convert the Army-Navy Hospital, Hot Springs, Ark., into a comprehensive rehabilitation center including research and demonstration activities of that scope, interest, and importance on the date of December 5, 1950.

Mr. FEREBEE. Yes.

Senator HILL. That is the report you speak of?

Mr. FEREBEE. Yes.

Senator HILL. Now you might give us—I don't know whether it shows on the face of it the year. I have it. Is this part of it? The members of the survey committee included?

Mr. FEREBEE. Yes, sir.

Senator HILL. Headed first by Mr. Frank Birdsall.

Mr. FEREBEE. That is correct.

Senator HILL. Mr. Ralph Bryan, Mr. James Burrows, Mr. Herbert Carleton, Mr. Gerald Clore, Dr. Frank Krusen, Mr. Curtis O. Little, Mr. Don W. Russell, Mr. Eugene C. Spratt, and Mr. Robert E. Thomas. Is that right?

Mr. FEREBEE. That is correct.

Senator HILL. That was the committee that made the report.

Mr. FEREBEE. I might point out that this survey was partially financed by a grant from the Office of Vocational Rehabilitation upon application by the State of Arkansas.

Senator HILL. Now they made recommendation with reference to funds, but they did not set out any figure, did they?

Mr. FEREBEE. No, sir, I believe not. Miss Switzer has included in our memorandum in our letter to Senator McClellan the maximum and minimum estimate.

Senator HILL. Yes. In the letter she said this—in fact, the last sentence of the letter is to this effect, and I quote:

However, the order of magnitude of such subsidy would appear to range between \$300,000 and \$500,000 in the partial year of operation which would be possible in 1960.

Are those the figures you had in mind?

Mr. FEREBEE. Yes, sir.

Senator HILL. All right. If you supply that data for the record, we will appreciate it, Mr. Ferebee.

Mr. FEREBEE. We will be glad to send it to you.

Senator HILL. We are glad to have you here. Is there anything you would like to add?

Mr. DEAN. I think not, Mr. Chairman.

Senator HILL. Glad to have you here. We appreciate your appearance very much.

Mr. FEREBEE. Thank you kindly.

REHABILITATION CENTER AT HOT SPRINGS, ARK.

Senator HILL. Senator Fulbright had hoped to be present this afternoon to present a statement regarding this proposed regional rehabilitation center at Hot Springs, Ark. He has been detained in another committee meeting, however, so his statement will be printed in full at this point in the record.

(The statement referred to follows:)

STATEMENT BY SENATOR J. W. FULBRIGHT

Mr. Chairman, I appreciate being given this opportunity to discuss the proposed regional rehabilitation center to be located at what is now the Army-Navy Hospital, Hot Springs, Ark.

As the members of this committee know, the Army has wanted to dispose of Army-Navy Hospital for several years. I have always felt that this was unwise, and have opposed the Army's position primarily on the basis that it would be extremely wasteful to let such a fine facility stand idle. This is a modern, well-equipped, 500-bed general hospital in good condition. It consists of 36 buildings on a tract of over 25 acres. The principal building is a nine-story brick, fire-resistant structure. The total cost of the hospital has been about \$20 million. This investment is now going to waste.

For the last 4 years Congress has recognized the value of Army-Navy Hospital by requiring that it be kept open, despite the Army's desire to close it. However, this strategy has been far from successful, since the patientload in the hospital averages only about 50 per day, and it costs the Army almost \$2 million a year to keep the hospital open. The Army has not shown good faith in this situation and has deliberately tried to keep the patientload at a low level in order to support its position. I am not here to complain about this tactic. My only interest now and in the past has been to insure that the facilities at the hospital are used in an effective manner.

Since the Army first indicated its desire to close the installation, the members of the Arkansas delegation have explored every possible means of interesting other Government agencies in taking it over. The Veterans' Administration, the Public Health Service, and the other armed services do not want it. It has become an "ugly duckling" to the Government. After exhausting all avenues for Government use, I became interested in the possibility of establishing a regional rehabilitation center at the hospital, patterned along the lines of the center now operating at Fishersville, Va. After discussions with officials of the National Rehabilitation Association, arrangements were made to have a suitability survey made of the hospital facilities by experts in rehabilitation work. This survey was financed through a grant from the Office of Vocational Rehabilitation.

On December 5, 1958, the survey committee published a report of its findings. In brief, the committee concluded that the physical plant and equipment of the Army-Navy Hospital were ideally suited for use as a comprehensive rehabilitation center. The committee recommended that the Arkansas Vocational Rehabilitation Service administer and operate the proposed center, accepting disabled clients on a nationwide basis. It was proposed that the operation of the center be financed through grant funds from the Federal rehabilitation program, to be matched by the State of Arkansas.

I know that this committee is thoroughly familiar with the value of vocational rehabilitation work. It is estimated that approximately three-fourths of a billion dollars is spent annually in public assistance grants as the result of neglected disability. Rehabilitation of disabled persons is essential in order that the greatest possible number of our citizens can be productive, self supporting workers rather than be supported by public assistance, or families and friends. At the present time there is no comprehensive center in the south-central part of the United States which provides all rehabilitation services, including vocational training. Such a center, serving a large geographical area, is urgently needed. I might mention that the proposed project has the full support of rehabilitation officials in all of the States bordering Arkansas. Arkansas has one of the best rehabilitation programs in the Nation. The State ranks at or near the top in the country in per capita expenditures for rehabilitation. Our State agency expects to rehabilitate 2,400 disabled persons during this fiscal year, which would place it first in the Nation when considered on a population basis. The agency has a dynamic and aggressive director in Mr. Don Russell, and I know that he can make a success of the proposed regional center. The Army-Navy Hospital is ideally located and its physical facilities are well suited for the operation of a rehabilitation center. The citizens of Hot Springs have the proper community attitude for such a project. The climate is excellent and the surroundings are ideal. The proposed facility would have a normal operating capacity of 550 to 600 disabled persons. In addition, as many as 100 more

would be regularly employed in the rehabilitation workshops. Those employed in the rehabilitation workshops would be earning a wage and would in all probability live outside the center. It is estimated that the average length of stay in the center would be approximately 6 months and, thus, approximately 1,300 would be served annually. I want to emphasize that the center would be open to patients throughout the Nation, not just to those from Arkansas. This center can serve as a pilot project for comprehensive rehabilitation facilities in other parts of the Nation. It is also possible that facilities at the center could be used on a national basis for research and demonstration purposes.

Bills have been introduced in both the House and the Senate to provide for a transfer of the hospital and its equipment to the State of Arkansas for the establishment of a rehabilitation facility. It is my understanding that this legislation meets with the approval of the Government agencies concerned, and no difficulty in obtaining passage is anticipated. The remaining problem is that of financing the actual operation of the center. The General Assembly of Arkansas, at its last session, appropriated \$200,000 in State funds to match Federal funds for the establishment and operation of the proposed center. It also passed enabling legislation for the Arkansas Rehabilitation Service to assume control of and operate the center. We now need an additional \$1 million in grants to the State to match the State funds which have already been appropriated. The necessary alterations can be financed through the Hill-Burton program on a matching basis.

The House failed to approve the additional \$1 million needed to get this rehabilitation center underway. The potential of the proposed center is great, and it appears to be the best possible use for the hospital under present circumstances. I emphasize that the Government is now spending almost twice as much at this hospital as would be required for the rehabilitation center, with less than one-tenth of the patient load which would be possible under the new proposal. Unless the additional grant funds are provided to the State, the hospital will remain practically unused. Simple economics dictate that the Government take steps to insure that better use is made of this facility than is now being done.

I urge that the committee include an additional sum of \$1 million for the rehabilitation grant program to enable Arkansas to get started on this project.

FUNDS FOR HOSPITALS IN VERMONT

Senator HILL. Senator Aiken has written to me calling the committee's attention to two letters which he has received from the Rutland, Vt., Hospital and the DeGoesbriand Memorial Hospital, Inc., of Burlington, Vt., with respect to the appropriation for hospital construction, advocating appropriation of the full amount authorized. Senator Aiken's letters, as well as those from the hospitals, will be included at this point in the record.

(The letters referred to follows:)

U.S. SENATE,
COMMITTEE ON AGRICULTURE AND FORESTRY.

May 25, 1959.

Hon. LISTER HILL,

Chairman, Senate Appropriations Subcommittee on Department of Labor, Health, Education, and Welfare, and Related Agencies, U.S. Senate, Washington, D.C.

DEAR LISTER: I understand that, at the present time, your subcommittee is conducting hearings on the Hill-Burton appropriation and I would like to bring to your attention a letter I have just received from the administrator of the DeGoesbriand Memorial Hospital of Burlington, Vt.

I know from personal contact with our hospital officials in Vermont that the Hill-Burton program has been essential to the adequate development of hospital care for our people.

On behalf of the hospitals of my State, I urge that your committee give careful consideration to the hospital needs of the country by including a reasonable sum for the continuation of this work. I would also appreciate it if you would place this letter in the record of hearings.

Best regards.

Sincerely yours,

GEORGE D. AIKEN.

DEGOESBRIAND MEMORIAL HOSPITAL, INC.,
Burlington, Vt., May 22, 1959.

Senator GEORGE D. AIKEN,
U.S. Senate, Washington, D.C.

DEAR SENATOR AIKEN: At the present time Congress is considering appropriations for the Hill-Burton program. It is my understanding that the House Appropriations Committee has reported out a bill which is very favorable. It is my understanding that the law will allow a still higher appropriation.

We would appreciate your endorsement of an appropriation of the maximum amount allowed. At the present time there are two projects for hospitals and nursing homes in the city of Burlington. We, at the DeGoesbriand, requested money from the Health Commission, which allots Hill-Burton money, for an amount of money to enable us to build supporting facilities such as kitchen, dining room, storage rooms and so forth for our new nursing home. It is our hope that, in the very near future we can replace one of the older buildings and add new acute beds which are very badly needed. One of the present buildings is outmoded and will have to be replaced in the near future.

Unfortunately, we were not allowed any of the acute money although we were given nursing home money. This puts us in a very difficult situation, since we have sent out requesting bids on the nursing home building. If there is a higher appropriation, and it is possible that we will be able to obtain some of this money from the Hill-Burton fund through the Health Commission, it will ease the financial burden on the hospital and on the citizens in this area.

Your support of these measures would be appreciated.

Very truly yours,

JOHN F. BERRY, *Administrator.*

U.S. SENATE,
 COMMITTEE ON AGRICULTURE AND FORESTRY,
May 14, 1959.

Hon. LISTER HILL,
Chairman, Senate Appropriations Subcommittee on the Department of Labor, and Health, Education, and Welfare and Related Agencies, U.S. Senate, Washington, D.C.

DEAR LISTER: Mr. F. C. Houghton, administrator of the Rutland Hospital in Rutland, Vt., one of the largest hospitals in my State, has written me the enclosed letter urging restitution of the full amount of Hill-Burton funds permissible under the law for fiscal year 1960.

I should like to ask that this letter be made a part of your record and add that my own close contact with hospitals in Vermont has enabled me to know how extremely valuable the Hill-Burton program is to the institutions in my State.

I would appreciate your giving these items full consideration in the light of the need for such funds.

Best regards.

Sincerely yours,

GEORGE D. AIKEN.

THE RUTLAND HOSPITAL, INC.,
Rutland, Vt., May 12, 1959.

Hon. GEORGE W. AIKEN,
U.S. Senate, Washington, D.C.

DEAR SENATOR AIKEN: It is our understanding that hearings on the subject of Hill-Burton appropriations will be started in the Senate almost immediately.

The House has reported out a bill which appropriates a total of \$143,700,000 for this program. Of this total amount, \$121,500,000 is earmarked for the basic (pt. C) program. This is \$28,500,000 under the maximum that could be appropriated under the law.

Also the House has earmarked \$4 million for nonprofit nursing homes under part G. This is \$16 million less than the maximum authorized for this category under the law.

As a recipient of Hill-Burton funds during the past 2 years, the Rutland Hospital is very conscious of the benefits of the program and would like to urge your consideration of appropriating the full amounts permissible under the law.

There are many needs in Vermont and other States still to be met and this program is one of the finest ways of assisting local communities in meeting such needs.

Your consideration will be very much appreciated.

Sincerely yours,

F. C. HOUGHTON, *Administrator.*

HOSPITAL CONSTRUCTION FUNDS

Senator HILL. Mr. Kenneth Williamson, associate director, American Hospital Association, Washington, has also written to me urging the appropriation of the full amount of the authorization for the hospital construction program. Mr. Williamson's letter will appear at this point in the record.

(The letter referred to follows:)

AMERICAN HOSPITAL ASSOCIATION,
Washington, D.C., May 12, 1959.

Hon. LISTER HILL,

Chairman, Subcommittee on Labor, and Health, Education, and Welfare, Senate Appropriations Committee, Senate Office Building, Washington, D. C.

DEAR CHAIRMAN HILL: The American Hospital Association takes this opportunity to present to you and the members of your subcommittee its views on the 1960 fiscal appropriation for the Hill-Burton program. For the reasons hereinafter stated, may we respectfully stress the urgent need for the total authorized appropriation of funds under the Hospital Survey and Construction Act for: (1) part C facilities; and (2) the nursing home category under part G.

Despite the funds which Congress annually has made available under this law, ground will be lost this year, as it has been in past years, in terms of providing the total health facilities required to meet the needs of the American people. Such loss occurs principally through the factors of obsolescence of existing hospital buildings and the need for new hospital construction to meet the requirements of the annual increment to our population.

Another matter of grave concern is the tremendous shortage of hospital beds that was built up during the periods of the devastating depression of the early thirties and the Second World War when few hospitals were built. Reduction of this shortage cannot be accomplished within the authorization permitted for part C facilities under the Hospital Survey and Construction Act.

The costs of building facilities to provide for our unmet health needs has increased each year with rises in the costs of construction, equipment, labor, and land. For example, on a per bed basis, for general hospitals, construction costs have risen from a figure of less than \$12,000 a bed at the time the program started to a figure today well in excess of \$18,500.

In terms of the loss to the public through neglect of health needs, this direct dollar cost of construction is likely to be less important.

Congressional approval last year of the sum of \$186.2 million for the hospital survey and construction program was indeed most gratifying. This sum included the full authorization for part C facilities and substantial amounts for part G facilities. This action clearly accorded with the needs evidenced by the States in their State plans.

This year the President in his budget message has recommended the sum of \$101.2 million for this program. Though this amount appears as an increase over that which he originally requested last year, it still falls far short of the \$211.2 million which the law permits annually. According to the most recent figures we have seen, the States, in their approved State plans have established an overall need of 1,117,056 beds in-patient facilities. Of this total, 174,292 are said to be needs for general hospital beds, and 512,102 for beds in facilities for long-term care. The major part of the long-term facility needs is for nursing homes. Additionally, of the four types of facilities provided for within the categories (part G) nursing home need is the one most prevalent among the States. It exists in all of the States as contrasted to certain of the other part G facilities for which need has not been evidenced in all States. Based on the evident need for nursing homes, we would urge the full authorized appropriation for this category under part G.

The American Hospital Association has been greatly concerned with the continuing unmet need for the renovation and modernization of existing facilities. A study undertaken of this need several years ago indicated that it amounted in excess of a billion dollars. Projections made since would indicate that this figure was indeed minimal and the need today is more likely to be over \$2 billion. Obsolescence of existing general hospitals develops at the rate of approximately 2 percent of the existing beds per year. Based on current bed costs, to meet this annual obsolescence would alone require an expenditure in excess of \$150 million. This amount, of course, does not go toward meeting the needs of the several million persons we add annually to our rapidly expanding population. Nor, as we have indicated, does it indicate possible reduction of the tremendous existing shortage of hospital beds.

Urgent need for renovation and modernization, which has been so largely neglected by the present program, exists in the main in cities and larger population centers throughout the country. Most importantly, it exists in those facilities upon which the Nation is most dependent for the translation of medical research into usable procedures, and for the education of physicians and other badly needed health personnel. Though time and scientific advances cause obsolescence in all hospitals, what we are concerned primarily with here is critical obsolescence, representing an accumulation over many years, especially in the older cities throughout the country. The overall need for renovation and modernization projects is so vast nationwide that a new Federal program providing financial assistance is sorely needed.

We would urge also, in light of existing needs, the full authorized appropriation of \$150 million for facilities under part C.

In any program of the magnitude of Hill-Burton and its importance to the health of the American people, it is essential that there be on-going research. This association, therefore, recommends that the full authorization of \$1.2 million for this purpose be approved.

The American Hospital Association appreciates the opportunity of presenting its views on this vital legislation and respectfully asks that serious consideration be given the recommendations made.

It would also be appreciated if you would include this letter in the record of your hearings.

Sincerely yours,

KENNETH WILLIAMSON,
Associate Director, American Hospital Association.

SUPPORT FOR HOSPITAL CONSTRUCTION FUNDS

STATEMENT OF HON. JOHN SHERMAN COOPER, A U.S. SENATOR FROM THE STATE OF KENTUCKY

PREPARED STATEMENT

Senator HILL. The committee will now hear from Senator Cooper.
Senator COOPER. Mr. Chairman, I thank you for your consideration.
I will be just a minute.

I have a prepared statement which I will file with the committee.

Senator HILL. Your statement will appear in the record at this point.

(The statement referred to follows:)

Mr. Chairman and other members of the subcommittee, I appreciate the opportunity to express to you my concern and the concern of many of my constituents in the appropriation of adequate funds for the hospital construction program authorized by the Hill-Burton Act. I am well aware of the continuing interest of this subcommittee, and indeed the entire Senate, in the program which has been of such great assistance to our Nation's communities in their efforts to provide adequate hospital and nursing home facilities.

I do not believe it is necessary to take the time of the subcommittee to discuss at length the needs for the program. It is sufficient merely to repeat the sentiments expressed by the House Committee on Appropriations in its report on H.R.

6769, the bill under discussion. The committee summed up the situation admirably in the following paragraph on page 11:

"For a nation that prides itself in not only being the most wealthy nation in the world, but in putting the welfare of the individual on the highest level, it is unthinkable that we should continue to let a condition like this exist, where people are deprived of good medical care when it is within our power to make it available to them."

In the State of Kentucky in fiscal year 1959, \$5,246,000 were made available. The amount requested by the Department of Health, Education, and Welfare for fiscal year 1960 would provide \$2,717,000, and the increased appropriation approved by the House of Representatives would make an estimated \$3,944,000 available to Kentucky. The information that I have received from prominent Kentuckians concerned with hospital and nursing home construction in our State indicates that the very least that should be made available is the same amount that was appropriated in fiscal year 1959. I urge, therefore, that the subcommittee recommend continuing the program at at least the same level as that which prevailed in the current fiscal year. This would require an increase over the House-approved amount of \$42.5 million, an amount that hardly seems excessive in view of the House committee's statement quoted above, and our own personal knowledge of the increasing need for hospital and nursing home facilities.

Mr. Chairman, I know how sympathetic you and the other members of your subcommittee have been toward this program, and I feel certain you will not permit the program to decline.

NURSING HOME CONSTRUCTION

Senator COOPER. And I would just say that my statement is directed to an item title 2, Department of Health, Education, and Welfare, grants for hospital construction which I understand includes also nursing home?

Senator HILL. Yes, sir.

Senator COOPER. My statement asks the committee to restore the appropriation to at least that amount which was appropriated last year. The House restored one-half, and I hope this committee will. I know the sympathetic attitude of the chairman, so I leave the matter with him and the committee.

Senator HILL. Senator, I am sure it is not necessary for the Chair to tell you how gratified he is that you take a few minutes out of your very busy time to come here to file this statement and make the statement you have. We appreciate it very, very deeply.

Senator COOPER. I thank the chairman.

Senator HILL. Thank you.

HOSPITAL CONSTRUCTION PROGRAMS

Senator Clark has requested that his statement urging this committee to approve the appropriation of the full authorization for the hospital construction program. Senator Clark's statement will be included at this point in the record.

(The statement referred to follows:)

STATEMENT OF SENATOR JOSEPH S. CLARK ON BEHALF OF INCREASED HILL-BURTON FUNDS

Mr. Chairman, last year I appeared before your committee to ask for appropriation of the full \$210 million authorized under the Hill-Burton program. At that time, I presented a list of 35 Pennsylvania hospital projects which were ready to proceed during the 1959 fiscal year if funds were made available. As the result of the leadership of your committee in raising the appropriation to the level of \$186 million, 20 of these 35 projects have gone into construction.

Again this year, Pennsylvania is ready to use its share, which comes to \$11.2 million, if the full \$210 million is appropriated. The need for hospital facilities is urgent. The matching funds are available. We still have—as has the Nation as a whole—a need for jobs to reduce our severely high level of unemployment.

The Department of Welfare in Harrisburg has pending a total of 67 applications for Federal assistance to hospitals and other medical facilities. Their total cost is estimated at \$81,285,000, of which the Federal share would be \$27,095,000. This would represent Pennsylvania's share of an annual \$210 million appropriation for more than 2 years ahead. Of the 67 projects, 26 are ready to proceed:

Project	Estimated cost	Federal share
Clearfield Hospital, Clearfield.....	\$1,350,000	\$450,000
Easton Hospital, Easton.....	300,000	100,000
Hamot Hospital, Erie.....	2,550,000	850,000
Elizabeth Steel Magee Hospital (laboratory), Pittsburgh.....	900,000	300,000
Riddle Hospital, Media.....	5,100,000	1,700,000
Riverside Osteopathic Hospital, Norristown.....	420,000	140,000
Sewickley Valley Hospital, Sewickley.....	1,500,000	500,000
West Allegheny Hospital, Coaldale.....	600,000	200,000
Erie County Nursing Home, Erie.....	3,000,000	1,000,000
Hamarville Rehabilitation Center, Pittsburgh.....	300,000	100,000
Elizabeth Steel Magee Hospital (diagnosis and treatment), Pittsburgh.....	345,000	115,000
Robert Packer Hospital, Sayre.....	810,000	270,000
Aliquippa Hospital, Aliquippa.....	306,000	102,000
Chestnut Hill Hospital, Philadelphia.....	1,500,000	500,000
Children's Hospital, Pittsburgh.....	1,200,000	400,000
Holy Spirit Hospital, Harrisburg.....	6,480,000	2,160,000
Indiana Hospital, Indiana.....	600,000	200,000
Memorial Hospital, Towanda.....	540,000	180,000
Muhlenberg Medical Center, Bethlehem.....	6,900,000	2,300,000
Nazareth Hospital, Philadelphia.....	4,200,000	1,400,000
Williamsport Nursing School, Williamsport.....	1,200,000	400,000
Adams County Nursing Home, Gettysburg.....	381,000	127,000
Mercer County Nursing Home, Mercer.....	1,890,000	630,000
St. Margaret Hospital (rehabilitation), Pittsburgh.....	246,000	82,000
Stephen Smith Home for Aged, Philadelphia.....	450,000	150,000
Workmen's Circle Home, Media.....	300,000	100,000
Total.....	43,668,000	14,556,000

Moreover, by the time the Federal funds are appropriated, sponsors of others of the 67 projects mentioned above will undoubtedly be ready to give assurances that they have the matching funds and are capable of proceeding.

As the House Appropriations Committee noted in its report, the President's budget request of \$101 million made "no provision for making inroads into the enormous backlog of need that exists * * *" I cannot agree that this country should adopt as a conscious plan and program the maintenance of our accumulated backlog. Certainly we should find a way, within the framework of a balanced budget, to schedule the systematic reduction of our deficit in hospital beds. This was the intent of the Hill-Burton Act, and we should stick by that intent.

For these reasons, I hope this committee will not only support the 1959 level for the Hill-Burton program—\$186 million—but will give the Senate the opportunity to vote for the total authorization, \$210 million.

SENATOR HILL. Now, Mr. Eugene L. Stewart, Scientific Apparatus Makers Association.

Mr. Stewart, we are happy to have you. Come around.

I believe you said you were accompanied by members of the association.

SCIENTIFIC APPARATUS MAKERS ASSOCIATION

STATEMENT OF EUGENE L. STEWART, GENERAL COUNSEL

IMPORTANCE OF NATIONAL DEFENSE EDUCATION ACT

Mr. STEWART. They are present, Mr. Chairman, and if I get into water over my head I will be pleased to call on them.

Senator HILL. All right. We are glad to hear from you now, Mr. Stewart.

Mr. STEWART. Mr. Chairman, the Scientific Apparatus Makers Association recognizes at the outset here the tremendous importance of the National Defense Education Act.

Senator HILL. Excuse me 1 minute. We will put your statement in the record in full and then you can make any other statement you see fit. I want to assure you that your full statement will be in the record.

Mr. STEWART. Thank you.

(The statement referred to follows:)

STATEMENT OF EUGENE L. STEWART, REPRESENTING THE SCIENTIFIC APPARATUS MAKERS ASSOCIATION

Mr. Chairman and members of the committee, I am Eugene L. Stewart, a member of the law firm of Hume & Stewart, special counsel for the Scientific Apparatus Makers Association. This is the trade association of domestic producers of scientific apparatus. It represents 232 member companies. The association has six sections, each representing the producers in a well-defined sector of scientific instrument manufacture. They are the laboratory apparatus section; laboratory equipment section; optical section; industrial instrument section; nautical, aeronautical, and military section; and the recorder-controller section. Though the matter to which we shall direct our remarks pertains most directly to the interests of the members of the laboratory apparatus and optical sections, the gravity of the matter to scientific apparatus manufacture in general has led all of the sections of SAMA to unite in approving a resolution expressing opposition to the use of Federal grant-in-aid funds under the National Defense Education Act to purchase science teaching apparatus from the Soviet Union.

The association thanks you for the opportunity to present this testimony in support of an amendment which would impose such a limitation on the funds appropriated to the Department of Health, Education, and Welfare for defense educational activities in the fiscal year 1960. Specifically, we support the type of amendment which was offered by Senator Bridges to the second supplemental appropriation bill, 1959, during the debate on that bill in the Senate.

We can appreciate your committee's desire to inquire fully into this matter and believe that our testimony will be most helpful to you in an understanding of the necessity for such an amendment if developed under the following points:

(1) The Nation's security depends on a rapid and sustained expansion in our educational resources for and vocations in the sciences; equipping the science classrooms of our secondary schools with science teaching apparatus adequate in quality and amount to sustain this expansion in science education is an essential part of our national defense educational program. Federal grant-in-aid funds to make this reequipment program possible will supply a dynamic quality to the educational market, long stagnant due to insufficient funds.

(2) A balanced expansion in America's science education resources should include expansion and development of the domestic industry's capacity to manufacture and supply the increased amounts and types of equipment needed for secondary schools in carrying out this program. But the economic incentive required for such growth, now available through the Federal grant-in-aid program, will be destroyed if the Russians are permitted to preempt these funds through the destructive pricing of their surplus science teaching apparatus for sale on the American market.

(3) Soviet Russia is mass producing science teaching apparatus and has a present capacity to send large quantities of such apparatus to the United States for sale to secondary schools under the Federal grant-in-aid program.

(4) Under its state-controlled economy, Soviet Russia has the power to make this surplus science teaching apparatus available for sale in the United States at prices selected without regard to production costs as part of an economic or political or combined economic-political offensive.

(5) The landed prices at which Russian science teaching apparatus is being offered for sale to secondary schools in the United States, ranging from one-

tenth to one-half the price of comparable U.S. equipment, are so low that the domestic producers will find it impossible to compete.

(6) The domestic industry producing science teaching apparatus is preponderantly composed of small business organizations who are powerless under existing Federal laws to cope with the concentrated power of a Soviet economic offensive. A limitation on the use of Federal grant-in-aid funds is the only practicable means to protect this industry from the destructive pricing of Russian science teaching apparatus, and to insure that the Nation's defense educational program is not retarded in a vital sector.

(7) The purchase of Russian apparatus by the Nation's secondary schools under the Federal grant-in-aid program will also constitute a propaganda victory for Russia—

(a) By exposing the Nation's youth at an impressionable age to a situation which would incorrectly imply Russian technological superiority over the United States;

(b) By exposing the many exchange teachers from foreign countries teaching in our schools to a situation which would incorrectly imply Russian superiority over the United States in the field of science and technology.

I

The Nation's security depends on a rapid and sustained expansion in our educational resources for and vocations in the sciences; equipping the science classrooms of our secondary schools with science teaching apparatus adequate in quality and amount to sustain this expansion in science education is an essential part of our national defense educational program. Federal grant-in-aid funds to make this reequipment program possible will supply a dynamic quality to the educational market, long stagnant due to insufficient funds.

The declaration of policy in the National Defense Education Act states:¹

"The Congress hereby finds and declares that the security of the Nation requires the fullest development of the mental resources and technical skills of its young men and women. The present emergency demands that additional and more adequate educational opportunities be made available. The defense of this Nation depends upon the mastery of modern techniques developed from complex scientific principles. It depends as well upon the discovery and development of new principles, new techniques, and new knowledge."

This emergency exists because of the continuing Soviet threat to our national welfare. The House committee report on that act states:²

"America is confronted with a serious and continuing challenge in many fields. The challenge—in science, industry, government, military strength, international relations—stems from the forces of totalitarianism. This challenge, as well as our own goal of enlargement of life for each individual, requires the fullest possible development of the talents of our young people. American education, therefore, bears a grave responsibility in our times.

"It is no exaggeration to say that America's progress in many fields of endeavor in the years ahead—in fact, the very survival of our free country—may depend in large part upon the education we provide for our young people now."

Among the problems which require solution in providing the "additional and more adequate educational opportunities" referred to in the act is the serious shortage of scientific apparatus and equipment for science instruction. The House committee report on the act states in this regard:³

"There is no question as to the need for strengthening and expanding the teaching of mathematics, science, and modern foreign languages in our elementary and secondary schools. The vital importance of these subjects to our national defense and to the conduct of our foreign economic, cultural, and diplomatic relations is inescapable. Instruction in these subjects—utilizing modern techniques and equipment—must be adequate at the elementary and secondary school level if we are to produce the educated people our Nation needs in the years ahead. The plain cold fact is that these subjects are neglected ones in all too many of our schools today.

¹ Sec. 101, Public Law 85-864.

² H. Rept. 2157, 85th Cong., 2d sess.

³ Ibid.

"Subcommittee hearings revealed that during recent years most school districts throughout the country have been pressed with problems caused by increased enrollments, such as financing new construction and obtaining sufficient teaching personnel. As a result, needs for adequate laboratory facilities, equipment, and other teaching aids have been neglected. This, of course, has in many instances interfered with effective teaching in science, mathematics, and foreign languages."

To meet this need, title III of the act authorizes grants-in-aid to the States for the acquisition of equipment suitable for use in providing education in science, mathematics, and modern foreign languages.

The findings of inadequately equipped science classrooms due to insufficient funds, which led to the passage of title III of the National Defense Education Act, are confirmed by two recent studies of science teaching facilities in the Nations' secondary schools and colleges. One, conducted by the Research Division of the National Education Association, concludes as follows:⁴

"To the extent that the schools in this study are representative of all secondary schools, it is safe to say that all public secondary schools spent a minimum of \$30 million for science equipment, apparatus, and supplies in the fiscal year prior to the spring of 1958 and that their minimum estimated unfilled needs at that time were for almost \$94 million more. This is far short of actual needs for a truly modern science program. Large schools estimated greater money needs per school than did smaller schools. Small schools indicated greater money needs per student enrolled in science than did larger schools.

"Approximately 9 in 10 schools reported that one or more of a series of limitations listed in the questionnaire were seriously handicapping their programs of mathematics and science instruction. Shortage of models and apparatus was most frequently checked for mathematics; shortage of laboratory work stations and shortage of experimental apparatus, most frequently in science. * * *"

The second study, made by the committee on apparatus of the American Association of Physics Teachers, was primarily directed to the physics departments of selected colleges and universities during the 1956-57 academic year. That committee's summary report⁵ states that "the chief problem here [affecting the acquisition and use of physics apparatus] is the financial one." This report also comments on anticipated changes in educational policy which will change the character or extent of laboratory work in physics, and it stresses the desire of physics teachers to secure new types of science teaching apparatus to support the changing nature and emphasis in course content. The report finds that "the competence and the manufacturing potential of the apparatus industry of the United States are entirely adequate to provide the new apparatus which physics teachers require" and urges the domestic apparatus industry in its own interest and in the national interest to take the initiative to make such apparatus available.

The searching reexamination of our educational resources, particularly in the area of the sciences, precipitated by Russian achievements with space satellites, coincided with a great transitional period in American science education. There is every reason to believe that educators themselves were acutely aware of the need for a vigorous reorientation of science education and the necessity of acquiring greatly increased amounts of money to support expanded programs of science education, as the National Education Association's study on mathematics and science teaching and facilities concludes:

"(1) Nationwide, high school graduating classes in 1957 possessed a far greater degree of mathematics and science literacy than has been supposed. These graduates started their high school careers in 1953.

"(2) The extent of the Nation's manpower needs in mathematics and science has not been defined. Secondary schools may be underachieving or overachieving. Nobody knows.

"(3) These schools show intensive efforts to revise and upgrade their mathematics and science offerings. Furthermore, the facts show that much solid accomplishment in these directions was on record before satellite-triggered re-creations jammed the air.

"(4) As schools move ahead in their mathematics and science programs, they meet limitations of classroom space, supplies, and equipment, and adequately qualified teachers. Much more money would help.

⁴ "Research Monograph 1959-M1." National Education Association of the United States, Washington, D.C., March 1959, p. 36.

⁵ "The Study of Apparatus for the Teaching of Physics. A Summary Report," committee on apparatus for educational institutions of the American Association of Physics Teachers, New York, N.Y., Oct. 15, 1957.

"(5) School size is directly related to adequacy of instruction in mathematics and science. * * *

"(6) Far more investigation into mathematics and science instruction is needed. * * *."

The point of the findings which underlie the National Defense Education Act, its declaration of policy, and the findings of the independent surveys referred to above, is that science education can be either the cutting edge of the weapon by which we maintain our superiority over Soviet Russia, and hence our national security, or it can be the Achilles heel of our Nation. Fortunately, it is now widely recognized that we must greatly improve our educational facilities for science instruction as well as increase the quality of the instruction and the numbers of young people who select science as a vocation. The fact that we are embarking upon this threefold program with vigor and determination, however, does not justify recriminations concerning the present status of our science education resources and programs compared with those of Soviet Russia. We should not overlook the fundamentally different nature of Soviet and American education. This difference is very succinctly summed up by the U.S. Office of Education, as follows:⁶

"The emphasis on science in Soviet schools contrasts sharply with the situation in the United States. Whereas the Soviet students graduating from secondary schools in June 1955 had taken courses in physics for 5 years, astronomy for 1 year, chemistry for 4 years, biology for 5 years and mathematics including arithmetic, algebra, geometry, and trigonometry for 10 years, less than a third of the American high school graduates had taken a year of chemistry, about a fourth had had a year of physics, and less than a seventh had taken advanced mathematics."

The National Education Association survey quoted above emphasizes that in the United States the adequacy of the science teaching facilities in our secondary schools varies directly in accordance with the size of the school. In the United States the greater number of secondary schools are small schools located in rural or suburban communities. These smaller schools are the least well-equipped for science instruction. The Soviet Union does not experience the problem of the relatively greater expense in equipping small schools for science instruction. The U.S. Office of Education describes the advantage of the Soviet Union in this respect, as follows:⁷

"Laboratory facilities in U.S.S.R. schools have, from all available reports, improved considerably since World War II in both quality and quantity of equipment. It is less expensive per pupil for the U.S.S.R. to install laboratories, because the schools are large and usually operate on two shifts (serving between 1,280 and 2,800 students per school). Because Soviet pupils start laboratory science in grade VI, the equipment is utilized throughout the day for different classes and grades. Although high schools of several thousand students are found in large cities in the United States, the majority are relatively small. The average number of students enrolled in a single high school for the entire country is about 200. Frequently the American school plant, unlike its Soviet counterpart, serves only the student body of a single shift."

If we are to gear the pace of science instruction in our secondary schools at or above that which exists in Soviet Russia, it is apparent that our schools must increase the number of science courses and increase the number of students enrolled in science courses. Both of these efforts will require greatly increased amounts of science teaching apparatus in our schools: For use in the new courses; and as additional facilities for the increased numbers of students. To these equipment needs must be added the equipment which is required to bring existing facilities for existing course content and enrollments up to an adequate level. Then the sum of these requirements as they may be determined to exist today must be programmed for the tremendous expansion in secondary school enrollment reflected by the following figures:

Total Secondary School Enrollment

1934-----	4, 496, 514	1956-----	8, 543, 000
1949-----	5, 399, 452	1965 (estimated)-----	12, 385, 000

⁶ "Education in the U.S.S.R." U.S. Department of Health, Education, and Welfare, Office of Education, Bulletin, 1957, No. 14, p. 67.

⁷ Ibid., at p. 88.

It is the purpose of title III of the National Defense Education Act in authorizing the expenditure of Federal funds for defense educational activities, and of the annual amounts appropriated by the Congress for the purchase of science teaching facilities, to provide a tremendous stimulus to secondary school financing which is required to fill these threefold needs: to bring present facilities and programs up to par equipmentwise; to equip for the new courses in the curricula revisions now extensively under consideration; and to provide equipment for the increasing numbers of young people who will be attracted to science courses.

An understanding of the real impact which the Federal grant-in-aid program will have on the educational market for scientific apparatus can be gained by comparing the funds which will be made available with the present size of that market. The National Education Association's study referred to above estimates that all public secondary schools spent a minimum of \$30 million for science equipment, apparatus, and supplies in the fiscal year prior to the spring of 1958. This estimate would suggest the secondary school educational market for scientific apparatus to be in the order of \$30 to \$40 million.

This association, based upon information from its member companies, estimates that the total educational market (both secondary schools and colleges, public and private) for the calendar year 1958 was in the order of \$50 million. This tends to corroborate the above estimate based on the National Education Association's survey of a secondary school educational market of \$30 to \$40 million in 1958.

The total funds which will be generated for the educational market (elementary and secondary schools) for science teaching apparatus by title III of the National Defense Education Act and the funds appropriated for defense educational facilities would appear to be as follows:

[In millions of dollars]

	1959-60	1959-60	1960-61	1961-62
Total appropriation.....	¹ 19.0	² 37.0	³ 60.0	⁴ 60.0
12 percent for loans to nonprofit private schools.....	2.2	4.4	7.2	7.2
2 percent for U.S. Territories and possessions.....	.3	.7	1.2	1.2
86 percent for grants to States.....	16.5	31.9	51.6	51.6
Matching funds to be supplied by States.....	16.5	31.9	51.6	51.6
Total available to State secondary schools.....	35.5	68.9	111.6	111.6

¹ Appropriated by Public Law 85-844.
² Appropriated by Public Law 86-30.
³ As provided in H.R. 6769, the regular fiscal year 1960 appropriation bill for the Departments of Labor and HEW.
⁴ Assumed on the basis of the proposed appropriation for fiscal year 1960.

NOTE.—Under title III of the National Defense Education Act, funds allotted to States as grants for the purchase of equipment for teaching mathematics, science, and modern languages will remain available for payment for State projects until the end of the fiscal year following the year for which the allotment is made.

Considering that some, if not all, of the funds now available for the purchase of equipment for use in teaching mathematics, science, and modern languages will continue to be available independently of the Federal grant-in-aid program and its matching State funds, it is apparent that the defense educational program will result in a threefold increase or more in the educational market for this type of equipment.

By any standard this represents a tremendous assist. The educational market, so long stagnant because of insufficient funds, will now become dynamic.

II

A balanced expansion in America's science education resources should include expansion and development of the domestic industry's capacity to manufacture and supply the increased amounts and types of equipment needed for secondary schools in carrying out this program. But the economic incentive required for such growth, now available through the Federal grant-in-aid program, will be destroyed if the Russians are permitted to preempt these funds through the destructive pricing of their surplus science teaching apparatus for sale on the American market.

It is estimated by our industry that its members who produce and sell for the educational market currently offer about 20,000 individual items of equipment or apparatus for science instruction in the secondary schools. Obviously no school purchases all of these items. But the highly individualistic nature of American science teachers is such that the demand for scientific equipment and apparatus takes the form of a requirement for relatively small quantities of a great many different items. At the level of spending by the secondary schools which has characterized the educational market until now, there simply has not been an economic incentive for business organizations operating under the profit system of our free competitive economy to spend large sums in developing and producing new items of equipment for the educational market. This is not to say that the domestic producers of science teaching apparatus for the secondary schools have stood still. On the contrary, dozens of new and important applications of science teaching apparatus have been developed and are now offered on the educational market by our member companies. A partial list of new items of this type which have been developed and marketed since 1946 is set forth in appendix I to this statement. These, however, represent achievements of the industry notwithstanding the almost insurmountable obstacle of a relatively small domestic market for any particular item of science teaching equipment which might be developed. As the chairman of this subcommittee observed in his capacity as chairman of the Senate Committee on Labor and Public Welfare during the lengthy hearings culminating in the National Defense Education Act, "There have not been enough sales or business in the past to justify our private enterprise system to keep up to date to meet these needs."⁸

Of coordinate importance, therefore, to the direct effect which the grant-in-aid funds will have in filling the science teaching needs of the schools, the increased funds should supply a dynamic factor which has been lacking for so long in the educational market for science teaching apparatus. This is the economic incentive required to enable the many domestic plants producing science apparatus to increase their production, introduce new and improved equipment, and otherwise gear their development and productive capacity to the heightened level of educational activity in the science. Without this coordinate effect, the Nation's resources for developing scientists and technologists to teach, perform research, and man technological posts in industry will be hampered by the absence of effective support, both for the long and the short term, in the form of increased quantities and improved quality of science teaching apparatus closely geared in time and concept to the developing needs of the schools in the unfolding of their improved science curriculums and expanded science course enrollments.

This balanced development of the Nation's resources for scientific and technological education can be retarded or even destroyed, however, if our national policy allows the expanded educational market for scientific teaching apparatus for the secondary schools to be preempted by Communist equipment. This can readily occur under the forced draft of the destructively low prices at which the Soviets have decided to make their surplus equipment available to the United States.

III

Soviet Russia is mass-producing science teaching apparatus and has a present capacity to send large quantities of such apparatus to the United States for sale to secondary schools under the Federal grant-in-aid program.

A team of U.S. scientists and engineers which visited the U.S.S.R. the latter part of August 1958, reports "that a competent U.S.S.R. instrument industry had developed, essentially from scratch, since the early 1930's."⁹ The members of the team were allowed to visit nine Russian manufacturing plants. The members saw many types of scientific apparatus, the designs of which "were strongly reminiscent of American designs," though in some instances the Russians had "innovated" by using techniques which have "found little favor or usage in the United States." The "most outstanding phase of instrument production" viewed by the U.S. group was a mechanized production line for recorders and indicators at a plant in Moscow. The team concluded that:

⁸ "Hearings on Science and Education for National Defense," Committee on Labor and Public Welfare, U.S. Senate, 85th Cong., 2d sess. (1958), p. 266.

⁹ "Control Engineering" (McGraw-Hill), November 1958, p. 65 et seq.

"The Soviets have made a considerable advance in establishing production plants for industrial instrumentation and in undertaking industrial applications of this equipment. They are now behind us in many aspects of sophisticated industrial instrumentation, in analysis instrumentation, in highly specialized data acquisition systems, and in certain facets of sophisticated application of control systems.

"There is, however, little room on our part for complacency.

"But neither is there need on our part for excessive alarm. There is simply the obvious challenge to keep our own instrumentation moving forward—as it has been—at a sufficiently high rate so that though the Russians move rapidly themselves, they may not overtake us."

While this group was specifically interested in the application by the Russians of control engineering and their use of control instruments in manufacturing operations, some of the plants which they visited (such as the "Vibrator" plant in Leningrad and the "Manometr" plant in Moscow) produce scientific apparatus of the type suitable for teaching use. Therefore, their report gives an insight into the characteristics of Russian manufacture of science apparatus for school use as well as that for industrial application. The group was at pains to inquire into the economics of the manufacture of scientific apparatus; and while very little detailed information was secured, it appeared to the members of the group "that selling prices are not necessarily related to production costs." The group also concluded from discussions with plant managers that Russian costs of mass-produced instruments are in the same range as U.S. costs for comparable items, notwithstanding the fact that the latter are not mass produced. The group reports that the Russians have indeed "demonstrated great ability at mass producing standard products [that is, in the scientific apparatus field] but they lag in developing and producing sophisticated products * * *."

To illustrate the achievement by the Russian instrument industry by mass production, the team reports¹⁰ that annual production at the "Vibrator" plant in Leningrad in 1957 was reputed to be 300,000 instruments valued at \$15 to \$20 million. One of the items produced at this plant is an 8-channel oscillograph, an instrument used in science teaching. The plant produces 300 of these instruments per month. The "Manometr" plant in Moscow is reported to produce 2,500 self-balancing recorder-indicators per month on an assembly line basis, and 40,000 mechanical pressure gages and manometer indicators per month, along with other instruments.

There are reported to be about 200 plants now engaged in the production of scientific and precision instruments in Soviet Russia. In an effort to meet the increasing demand for instruments and automation equipment, the U.S.S.R. has decided to build 26 new instrument plants and to reconstruct 17 others during the sixth 5-year plan. Instruments and automation are recognized in the U.S.S.R. as important factors augmenting the defense capabilities of the Soviet Union.¹¹

It is evident, therefore, that capacity for the mass production of instruments certainly exists to some degree in Russia in the field of science teaching apparatus. Mr. Paul Grindle, president of the Ealing Corp., the first U.S. importer of Russian science teaching apparatus, told the press on the basis of a trip he made to Russia that the production runs on the items of Russian apparatus which he will import have been large (5,000 to 20,000 units of each item),¹² and that the Soviet Union's annual production of science teaching apparatus was in the range of \$200 million.¹³ Mr. Grindle reports that the Russians are quite anxious to sell science teaching apparatus to the United States, and he is confident from the information which he gathered on his visit that these shipments would be made from surplus stock. These statements, coupled with the Ealing Corp.'s announced plans to import Russian apparatus at the rate of \$1 million during the next several years, show the availability of mass-produced Russian equipment in large quantities for the U.S. market. Bearing in mind that the U.S. price for the Russian equipment is in the average range of one-fifth that of domestically produced articles, it is apparent that the Russian imports brought in by just this one importer will displace U.S. production of science apparatus valued at \$5 million or more. If Federal funds are allowed to be used to purchase his Russian apparatus, his success will quickly increase his

¹⁰ Ibid., p. 59.

¹¹ "U.S.S.R. Electronic and Precision Equipment," Foreign Documents Division, Central Intelligence Agency, Dec. 22, 1958, p. 30.

¹² Chemical and Engineering News, Feb. 2, 1959, p. 48 et seq.

¹³ New York Herald Tribune, Feb. 2, 1959, p. 6.

tentative million dollar benchmark to a much higher figure and others will be clamoring to swell the stream.

IV

Under its state-controlled economy, Soviet Russia has the power to make this surplus science teaching apparatus available for sale in the United States at prices selected without regard to production costs as part of an economic or political or combined economic-political offensive.

It is a well-known fact that under its state-controlled economic system Russia has great flexibility in pricing its manufactures for sale in export markets. Secretary of State Dulles described this capacity very clearly in one of his last appearances before the Senate Foreign Relations Committee. In responding to a question posed by Senator Fulbright concerning the Communist economic offensive, the Secretary stated:¹⁴

"I consider this danger a very grave one, indeed, because under their type of economy they are not concerned at all with prices, as to whether they show a profit, whether they show a loss. It is all part of their political effort, and if they desire to do so, whether it be merely out of a desire to get foreign exchange or whether it be a desire to conduct economic warfare, they have a great capacity for damage.

* * * * *

"It is a very serious threat, because you can see a possibility that private concerns, one by one, can be put out of business. It is comparable to the situation when you had a very big combine combating the small grocery store, drugstore, and where, through the so-called loss-leader operation, they would sell one thing at way below cost to attract customers, and put the other little concern out of business, and when they put it out of business, then the price goes back again.

"This loss-leader operation can be conducted by the Communist world, and we have got to find the answer to it."

This concern is also widely shared by the industrial nations of Western Europe. A recent Foreign Service dispatch from the American consul in Stuttgart, reporting on the West German horological, optical goods, and precision instruments industries, states:¹⁵

"Soviet Russia, with its well equipped factories and large production, continued to be viewed by West German manufacturers with awe and fear; spokesmen for the industry anticipate increased competition from this source sometime in the near future, but not before Soviet internal demand for horological goods to a greater extent is satisfied. (Some local sources went so far as to state that the Russians presently are in position to compete with the Swiss.) Although most European countries license Soviet imports, local manufacturers are principally concerned over their export markets, which, they believe, the Soviets could easily undermine if the latter initiated a policy of increased foreign sales of horological goods, mainly for political ends" (p. 8).

Science teaching apparatus is no exception to the Russian capability to disrupt foreign markets through arbitrary pricing policies which make competition impossible. As summed up by *Business Week*:¹⁶

"Following a pattern laid down in aluminum and benzene, the Soviet Government's next invasion of the U.S. market will come in the school laboratory equipment market. That seemed clear this week as the first sample lot of 26 items arrived in the United States. The Soviet offer: delivery of the items, f.o.b. New York, at an average price only one-fifth of prevailing prices for comparable U.S.-made items."

Dr. W. C. Kelly, executive secretary of the American Association of Physics Teachers, has stated that Russian science teaching apparatus is so heavily subsidized that an importer can buy them for one-tenth the retail prices of American apparatus.¹⁷

¹⁴ Hearings on U.S. foreign policy, Committee on Foreign Relations, U.S. Senate, January 1959, p. 18.

¹⁵ Foreign Service Dispatch No. 102, Apr. 13, 1959.

¹⁶ *Business Week*, Jan. 24, 1959.

¹⁷ *New York Times*, Feb. 1, 1959.

V

The landed prices at which Russian science teaching apparatus is being offered for sale to secondary schools in the United States, ranging from one-tenth to one-half the price of comparable U.S. equipment, are so low that the domestic producers will find it impossible to compete.

The import house which is offering Russian science teaching apparatus in the United States has issued many statements to the press concerning the prices which will apply to its line of Russian-produced instruments. Examples cited include: ¹⁸

	Made in U.S.S.R. ¹	Made in United States
Hand rotator.....	\$15. 00	\$41
Liquid flow demonstrator.....	6. 30	20
Brownian motion demonstrator.....	6. 50	20
Spectrometer.....	53. 00	150
Variable transformer and voltmeter.....	45. 00	(²)
Armillary sphere.....	35. 00	75
Projector.....	75. 00	300
Microscope.....	48. 00	200

¹ F.o.b. U.S. points.
² \$80 to \$115.

The Ealing Corp.'s immediate import program for Russian apparatus includes 26 items selected from a catalog of 96 items made available for export to the United States by Raznoexport, the Russian agency charged with the sale of these products in the export trade. Mr. Grindle has announced that these items are being offered by the Soviet Union f.o.b. New York at an average price only one-fifth the prevailing prices for comparable U.S. articles.¹⁹ He has also stated that the U.S. prices for the Soviet apparatus will be one-half to two-thirds less than comparable items made in the United States. Whether the prices will range one-tenth below U.S. prices (as estimated by Dr. Kelly), one-fifth of prices of U.S. items (as reported in Business Week), or two-thirds to one-half less than the price of U.S. items (as Mr. Grindle has reported in the New York Times), the difference in price is so dramatic that the effect on the sale of the domestic articles will be the same.

If the Russian apparatus is, in fact, of comparable quality with the U.S.-produced items, as Mr. Grindle claims and some U.S. educators who have seen the equipment have stated, the range of initial cost to the potential customer (secondary schools) suggests such an apparently overwhelming saving (even though this proved ultimately to be illusory) that the possibility of its purchase cannot be lightly dismissed. Of course, the experience of the schools which would purchase Russian equipment might very well prove to be similar to that of users of other foreign-made microscopes. The lack of dependability and the difficulty of securing service, maintenance, and repair support can quickly lead to the realization that the initial saving was a delusion.

Nevertheless, the harm has been done when a secondary school makes its initial purchase of equipment. It is committed to the equipment for a period of time notwithstanding the fact that its science teachers and students may be handicapped by malfunctioning or disrepair of the article.²⁰ At the same time,

¹⁸ Chemical & Engineering News, Feb. 2, 1959, p. 48 et seq.; Wall Street Journal, Jan. 28, 1959.

¹⁹ Business Week, Jan. 24, 1959; Wall Street Journal, Jan. 28, 1959.

²⁰ In the case of many items of equipment, such as microscopes, for example, the experience of many educational institutions has shown that the apparent initial cost advantage of foreign equipment is, indeed, an illusion. Dissatisfaction with maintenance of such equipment has led many colleges to replace foreign equipment after but a few years of use. Significantly, domestically manufactured articles of this type carry a lifetime guaranty against original defects. Much of the foreign equipment being sold to our schools carries a maximum guaranty period of only 5 years. Again, the U.S. companies maintain a nationwide system of branch offices and sales representatives to provide service, maintenance, and repair on their articles whenever required. Though a source of considerable expense to the domestic companies, this type of customer support is invaluable to institutions who use scientific apparatus in important projects, whether they be classroom instruction, graduate research, or industrial research and development.

however, the domestic producers of science teaching apparatus who depend on the domestic educational market for continued operation and economic health will have lost the economic support represented by the products which were displaced by purchases of the Russian equipment.

VI

The domestic industry producing science teaching apparatus is preponderantly composed of small business organizations who are powerless under existing Federal laws to cope with the concentrated power of a Soviet economic offensive. A limitation on the use of Federal grant-in-aid funds is the only practicable means to protect this industry from the destructive pricing of Russian science teaching apparatus, and to insure that the Nation's defense educational program is not retarded in a vital sector.

The members of the Scientific Apparatus Makers Association are, for the most part, small independent business organizations which have been in the scientific instrument manufacturing field for many years.

The term "small business" used above would be applicable under any of the congressional definitions: i.e., a business in a trade or industry where it is not dominant, independently owned and operated, and with less than 500 employees [50 app. U.S.C.A. 468; 15 U.S.C.A. 662; 15 U.S.C.A. 632]. Nor would the application of the definition be perceptively changed by any of the criteria employed in the definition of a small business concern under the Small Business Act, 67 Stat. 233, 15 U.S.C.A. 631 et seq.

Of the 147 companies who are members of the laboratory apparatus section or the optical section of SAMA, who would be most directly affected by the imports of Russian science teaching equipment, only seven are big enough to be listed in Standard & Poors Directory.

The average age of the companies in the apparatus section is over 50 years (the average founding date is 1906) and in the optical section, 70 years (the average founding date is 1889). Still, over 14 of these companies have been founded and have carved a niche for themselves in the industry since the inception of World War II. Thus, we have the picture of a group of small business concerns whose products and services have met the requirements of competitive demands in this country for the better part of a century—companies which have met many changes, economic and physical; which have consistently met constantly varying demands and which have weathered, for better or worse, along with the rest of our industry, their periods of war and depression and uncertainty.

It is assumed during this period that the companies paid their fair share of local, State, and Federal taxes.

The operating results of these companies in 1958 show a profit to sales ratio below the average of all manufacturing corporations and below the instruments and related products group of which they are a part. Six of the seven companies listed in Standard & Poors had a profit to sales ratio, after taxes, of less than 3.2 percent. In fact, only two of these six companies were in the 3 percent range. Two of the companies were in the range between 2.5 and 3 percent; one of the companies was in the range between 2 and 2.5 percent; and one company operated at a loss. With the average profit to sales ratio, after taxes, of all manufacturing corporations for 1958 at 4.1 percent,²¹ and for the instruments and related products group at 5.1 percent,²² the above performance of the seven largest members of the laboratory apparatus and optical sections of the scientific apparatus industry is hardly an indication of unusually profitable operations.

A representative sampling of the operating results of the smaller companies for which data are not otherwise available publicly indicates that profits after taxes as a percentage of sales for the calendar year 1958 were in the 3 to 3½ percent range. Because the production methods involved in the manufacture of scientific apparatus involves an exceptionally high expenditure for direct labor (about 70 percent of the cost of the finished article, on the average), the larger companies do not enjoy the advantages which their size might otherwise suggest. As in the case of the larger companies, the small business organiza-

²¹ FTC-SEC, "Quarterly Financial Report for Manufacturing Corporations," 4th quarter, 1958, p. 6 (arithmetic average of 4 quarterly reports).

²² Ibid., p. 13.

tions producing scientific apparatus, including that appropriate for classroom use, were confined by the economic and marketing circumstances peculiar to scientific apparatus to a profit to sales ratio significantly below the average of all manufacturing industries and below the average for the instruments and related products group, of which they are a part.

The place of small business in the American economy has been enunciated as recently as last year by the Congress. There can be little doubt in this regard from the language set forth in the declaration of policy by the Congress in the Small Business Act (72 Stat. 384, July 18, 1958; 15 U.S.C.A. 631a) :

"The essence of the American economic system of private enterprise is free competition. Only through full and free competition can free markets, free entry into business, and opportunities for the expression and growth of personal initiative and individual judgment be assured. The preservation and expansion of such competition is basic not only to the economic well-being but to the security of this Nation. Such security and well-being cannot be realized unless the actual and potential capacity of small business is encouraged and developed. It is the declared policy of the Congress that the Government should aid, counsel, assist, and protect, insofar as is possible, the interests of small business concerns in order to preserve free competitive enterprise, to insure that a fair proportion of the total purchases and contracts for property and services for the Government (including but not limited to contracts for maintenance, repair, and construction) be placed with small business enterprises, to insure that a fair proportion of the total sales of Government property be made to such enterprises, and to maintain and strengthen the overall economy of the Nation."

Assuming, as we must, that the small businesses of this country are of value, we have in the science teaching apparatus and equipment industry the picture of a number of small business concerns—established, successful, and forming an integral part of the economic fabric of this Nation, and so recognized by their own Government—whose existence averages a period of more than five decades, now being subjected to a threat not from competition (which they have successfully met many times in the past), but to something far different, far more dangerous and infinitely more difficult to combat: the destructive pricing power of the Soviet Union directed at their principal market. Our Nation would not allow any concentration of economic power in the United States to practice such destructive price competition on the small business members of an entire industry—will it allow the concentration of economic power controlled by the Soviet Union to do it with impunity?

To say now that the products of these companies, having passed the acid test of American competition for over 50 or 60 years, are inadequate or inferior because they will be unable to meet this threat from a foreign government-supported commissariat to whom the term "cost unit" or competition has absolutely no meaning, is to impose a test which could not be met by the members of any industry in the United States.

Before allowing the use of Federal funds to purchase this Russian-made science teaching equipment, it would be of interest to discover if those persons who favor these purchases considered any or a part of the following questions :

(1) Assuming one corporation in the scientific apparatus field reached such a position of dominance that it had the power to offer, and did offer equipment at one-tenth of the price of its nearest competitor, would it be of interest to (a) the Congress, (b) the Antitrust Division of the Department of Justice, or (c) the Federal Trade Commission?

(2) Would the fact that, under our economic system, small business concerns, who have established over a long period of time a place in our competitive system, would of a necessity have to go out of this particular business have any bearing on their decision to buy at the cheapest price regardless?

(3) Should Federal funds be employed to mass-purchase articles from a nation with which we are admittedly competing against in an economic war whose boundaries are the world?

(4) Would it make any difference to these persons that the articles to be purchased by Federal funds are actually being "dumped" for propaganda or other purposes?

(5) Would they favor purchasing for secondary school use in the United States, Russian-published textbooks which adequately cover the science subject matter and are offered at prices one-tenth of U.S. textbook prices?

(6) Would the loss of our domestic textbook publishing industry and our science teaching equipment industry to the Russian "competition" and future

dependence on Russia for these essential school instruction items meet with their favor?

(7) Finally, if price alone is the determining factor in the expenditure of Federal funds for education, would these persons favor a program whereby U.S. citizens could be replaced on school faculties by Russian teachers of equal ability who would take only one-tenth of the salaries now received by our teachers?

By suggesting that these persons answer these questions, it should be emphasized that there is no attempt to question their motives. Rather, it should be made clear that an opinion expressed after a cursory examination of a piece of equipment should be valued at exactly what it is—and no more. Theirs is not the prime responsibility of determining whether the purchase of the equipment with Federal funds from the U.S.S.R. is a good or a bad thing. Given all the facts, which might, of course, be unavailable to them, theirs would still not be a responsibility consistent with a duty to the people to insure proper legislation in this regard.

In short, the responsibility for good and wise legislation in this matter rests squarely with this committee and, later, with the Congress of the United States.

It may be that the committee and the Congress will decide that the interests of the small business concerns represented by SAMA, with all that is entailed therein, must be subservient to some other consideration more worthy. But it will be no answer to shift the responsibility of the decision to another sovereign. It will be no answer to pass the decision on to the States and from there to the individual localities who are meant to be the beneficiaries of the appropriation.

It is understood that there are those who feel that any restriction on the expenditure of these funds is an insult to the principle of States rights; or, put another way, that any restriction on the expenditure of the funds is an undue interference with the rights of the States and their school districts to spend the money as, if, and when they see fit. While acutely conscious and appreciative of the principle involved, it is difficult, if not absolutely impossible, to determine how eliminating the U.S.S.R. as a supplier, under the precise circumstances here presented, amounts either to a restriction or diminution in the slightest of any freedom guaranteed to or desired by the sovereign States of this Nation.

It has not been, nor will it be suggested that the concerns which comprise SAMA shall be the sole suppliers to the scientific needs of our schoolchildren. It is suggested, however, that before these companies are driven from the American scene by a Communist economic offensive they are unable single-handedly to put down, the effects of a failure to protect these concerns at this time be closely studied and carefully weighed; that small business concerns in this country fulfilling a vital need in education for well over half a century are not to be considered inadequate or inferior because they cannot meet a price level conceived and set by some deadly caprice; that the traditional concern and consideration for the small business of this country be not now rejected or abandoned by this committee and the Congress; and that, above all else, these factors be given consideration without recourse to a principle that Federal interference with the States is involved. That issue should not—and need not—be here.

The principle of States rights, if it be properly understood, has never been treated or applied so as to be incompatible with the principles of free competitive enterprise enunciated by the Congress as necessary to our survival. To conjure up a conflict between the two at this time is to perform a disservice to one and to destroy the other.

Cleared of issues which have no part here other than to disguise, the real standard under fire here is whether a small business concern of this country can come before the Congress and receive that protection necessary to its survival and, in the words of Congress itself, "to the security of this Nation."

There are no laws of the United States presently available to protect a domestic industry from the type of economic warfare which Russia is capable of waging through the sale of her goods in U.S. markets at such extremely low prices that competition is impossible. It has been supposed by some that the Battle Act²³ applies to U.S. imports of strategic goods from Iron Curtain countries. The fact is, however, that the Battle Act is concerned only with the regulation of exports of strategic materials to Russia or countries under its domination and to the withholding of U.S. economic aid from a nation which fails to apply a similar embargo on its exports to Russia or other Communist-dominated countries.

²³ Mutual Defense Assistance Control Act of 1951, 22 U.S.C.A., 1611-1613c.

Similarly, the elaborate machinery for export control administered by the Department of Commerce under the Export Control Act of 1949 is also concerned solely with regulating exports of materials deemed to be strategic to the national security of the United States. While the Department of Commerce also provides by regulation for the use of U.S. import certificates covering strategic articles imported into the United States in order to prevent transshipment or reexport of such articles to a destination which would be prohibited under the Battle Act, these procedures impose no restriction on the importation into the United States of strategic goods from Soviet Russia or other Communist-dominated countries.

Since the sale of Russian goods in the United States at landed prices which are dramatically below the prevailing U.S. market prices for similar articles has the same or even a greater destructive tendency than conventional "dumping," it may be thought by some that the Antidumping Act of 1921, as amended, provides a means for protecting the domestic producers who are the victims of such a practice. Unfortunately, the Antidumping Act is inoperative against imports from Soviet Russia as a practical matter because the key concepts upon which that act depends for its operation are utterly inapplicable to imports from the Soviet Union.

The basic concept of the Antidumping Act is that whenever a domestic industry is likely to be injured by the importation of foreign merchandise into the United States at prices less than the "foreign market value" (or the "constructed value") of such foreign goods, the customs duties imposed may be increased by an amount equal to the difference between the depressed U.S. selling price of the imported article and its foreign market value (or constructed value). "Foreign market value" is defined in the law as the price at which the foreign merchandise is sold or offered for sale in the principal markets of the country of exportation (or to third countries) under circumstances where the price fairly reflects the market value of the goods. In the case of Soviet Russia, there are no "foreign market prices" as that term is understood. Under the law, where foreign market price cannot be ascertained, the bench mark which is used to determine whether the U.S. offering price of foreign goods involves "dumping" is the "constructed value." That term is defined as the sum of the material and labor costs plus general expenses and profit usually added in the manufacture and sale of such goods in the country of production. Normally, Treasury Department attachés or U.S. consular representatives in foreign countries are able to develop the facts pertaining to "constructed value" by making inquiries at the manufacturing plants in the country of production. In the case of Soviet Russia, however, such inquiries are out of the question; and even if they were made, there are no cost accounting data available which would yield on a basis intelligible by U.S. standards the cost of labor and materials plus the additions for general expenses and profit.

For these reasons the machinery of the Antidumping Act is simply inoperative when applied to U.S. imports of articles from Soviet Russia or other Communist-dominated countries.

It has also been suggested that section 303 of the Tariff Act of 1930 might be effective in checking the destructively priced imports of Soviet scientific equipment. That section of the tariff law provides that whenever a country pays or bestows, directly or indirectly, a bounty or grant on the manufacture or exportation of an article, upon the importation of the article into the United States additional duties equal to the amount of the bounty or grant may be imposed as "countervailing duties." But the operation of this law is necessarily dependent upon the ability of the Secretary of the Treasury to determine the amount of the bounty or grant. As in the case of "foreign market value" or "constructed value" in the Antidumping Act, this determination of the amount of the bounty or grant paid is simply impossible of ascertainment in the case of Soviet Russia.

The totality of the administrative decisions made by the political commissars in the Soviet Union which result in the exportation of an article to the United States at a greatly reduced price would, in effect, constitute the amount of bounty or grant. There is no way of determining what this figure may be; hence, it would appear to be impossible for the Secretary of the Treasury to make any finding which could lead to the imposition of a countervailing duty on the imported scientific apparatus. So, along with the other tariff remedies, the countervailing duties provision of our tariff law is not available as a means of checking the Soviet economic-propaganda offensive in scientific teaching apparatus.

Nor would the "escape clause" provision of the Trade Agreements Extension Act of 1951, as amended, be of help. This remedy is operative only with re-

spect to imports of an article which has been the subject of a tariff concession under the President's trade agreements authority. By virtue of the 1951 Extension Act, imports from Soviet Russia and other Communist-dominated countries are not entitled to receive the benefit of the tariff concessions which have been granted on U.S. import classifications in the past; hence, the Russian scientific teaching apparatus pays the full duty upon importation into the United States. Therefore, the escape clause procedure is of no avail in checking the destructive pricing practices applicable to the imports of Soviet scientific apparatus.

It is also obvious from the prices which are quoted by the Ealing Corp. for the sale of Russian scientific apparatus in the United States that the customs duties applicable to such imports are also inadequate to provide any significant deterrent to the destructive impact of these imports on the U.S. industry. Duties on scientific apparatus are ad valorem in nature, with the rates averaging about 40 percent. This percentage is applied to the value of the goods being imported which, in the absence of other information, is based upon the invoice price to the importer. Considering that the prices quoted by Ealing, referred to above, are f.o.b. the United States and include the cost of transportation, insurance, and the payment of duties, the enormous differential remaining shows that the duties are virtually useless. The Russian prices are so low that there is no semblance of the standard of fair competition between the Russian and U.S. goods in the United States which duties are intended to provide.

Under Secretary of State Dillon has summed up the reasons why our tariff and trade controls are ineffective against a Soviet trade offensive, as follows: ²⁴

"* * * all aspects of the Soviet economy are under the total control of the Government and the Communist Party, and are directed in accordance with a centrally determined plan. * * *

"This is a central fact the importance of which cannot be overemphasized. * * * no frame of reference exists by which internal prices and costs can be measured against those in the outside world. * * * Tariffs and trade controls, and such concepts as most-favored nation treatment and dumping, lose their conventional meaning when applied to this type of economy. * * * Foreign trade is used as an instrument which is manipulated to serve the purposes of the internal economic plan and the requirements of foreign political strategy."

A unique feature of this, the first major economic offensive of Soviet Russia against a U.S. manufacturing industry, is that the market in question will be sustained principally by Federal grant-in-aid funds. Because of this fact, it is possible for the Congress to provide a counteroffensive to the impending Soviet economic warfare by providing that the Federal grant-in-aid funds cannot be used for the purchase of equipment from Soviet Russia or other Communist-dominated countries. And this type of action by the Congress appears to be the only defense which our laws can provide.

VII

The purchase of Russian apparatus by the Nation's secondary schools under the Federal grant-in-aid program will also constitute a propaganda victory for Russia.

(a) *By exposing the Nation's youth at an impressionable age to a situation which would incorrectly imply Russian technological superiority over the United States.*—The type of scientific apparatus being made available by Soviet Russia for sale to our secondary schools under the defense education program consists of nonexpendable articles, substantial in nature, which should be expected to remain in use for many years. While it may prove to be the fact that Russian equipment does not stand up well under the conditions of rough use involved in secondary school education, it is certainly true that the type of apparatus concerned is that which normally gives many years of service. In appraising the propaganda impact of purchases by our high schools and junior colleges of Russian scientific apparatus, it is necessary to keep in mind that the Russian instruments will remain in the classroom year after year as a silent spokesman to succeeding classes of students.

This is an era when we are striving as a nation to maintain and increase our technological superiority over Soviet Russia. Congress in the National Defense

²⁴ Address by the Honorable C. Douglas Dillon, Under Secretary of State for Economic Affairs, before the American Management Association, New York, N.Y., Nov. 5, 1958.

Education Act recognized that the youth of America are the priceless ingredient in this struggle. Yet this same youth can be adversely affected in that very effort by the action of the Federal Government in standing mutely by while making it possible for the implements of technology of the opponent, Soviet Russia, to be placed in their midst to become a daily reminder of Soviet claims of prowess in science.

We may well ponder in this regard the testimony of Dr. Wernher von Braun before the Senate Committee on Labor and Public Welfare last year. He stated:²⁵

"Another point which I think should not be overlooked is the following: Our opponents in Soviet Russia adhere to communism, and communism is one of those 'isms' that go after the entire human being and not just for a part of him. All 'isms' including fascism and communism, have always indicated a very great interest in winning over the hearts of the children while they are young. They have always tried to get the children into their organizations while they are little."

In the debate in the Senate on April 28, 1959, on the amendment which Senator Bridges offered to the Second Supplemental Appropriations Act, 1959, to prevent the defense education funds in that bill from being expended for Soviet apparatus, the statement was made that "it is a bit far-fetched to suggest that our children will be subverted by the use of a test tube or mixing pot or stirring rod or, perchance, a microscope, manufactured in Czechoslovakia or Poland."²⁶ Again, disbelief was expressed that "the children of America are going to be subverted because they use a test tube or a microscope made in a particular foreign country. I do not believe our children are that impressionable. I believe their patriotism, which stems from home, schools, and churches, is sufficiently strong not to be influenced by the use of such instruments."²⁷ These statements appear not to give sufficient weight to the fact that young people in high school are searching for answers and being molded by the impressions they receive. Unfortunately, the evidence is rather strong that at least some of our young people in the past have received impressions from some quarter during their formative years which made them susceptible to Communist pressure in later life. Witness the acknowledged problem of the conduct of some American prisoners of war during the Korean conflict. The U.S. Navy summarized this situation as follows:²⁸

"Putting it bluntly, the record of the Korean war showed that an alarming number of American servicemen in that conflict were unreliable. Some of our weaknesses showed up in combat, other inadequacies were seen among Americans who were taken prisoner by Communist forces. An 'alarming number' does not mean a majority. Far from it. The vast majority of Americans who served in Korea bore up well.

"But there were enough deserters and backsliders among the combat troops to noticeably weaken our fighting efficiency in many instances. And in the POW camps of North Korea, enough American prisoners collaborated with the Communists willfully, knowingly, and to such degree that organized resistance by their more honorable fellow prisoners became extremely difficulty—virtually impossible in some of the camps. So even just a few are an 'alarming number' when their misdeeds have such far-reaching effects."

Young people need guidance in understanding the significance of the events which impinge upon their lives. The presence of Russian scientific apparatus in their high school science classrooms will not be accompanied by the information that the Russian articles happened to be there because the Soviet Union chose to send them to the United States at ridiculously low prices as part of a program of economic and propaganda warfare. They may know that the Soviet equipment is there because the U.S. Government allowed tax revenues to be used to purchase them. When they discuss with their friends, and those friends discuss with their friends in an ever-widening circle of awareness that their school has Soviet science equipment, and that the United States itself supplied the funds for its purchase, those stark facts alone will be present to work their effects upon the impressions which those young people receive of the competence of their fellow Americans in the field of science and technology and the determination of their Government to stand fast against the increasing acts of communism to bury us all.

²⁵ Op. cit., supra, n. 8, p. 68.

²⁶ Congressional Record, Apr. 28, 1959, p. 6227.

²⁷ Ibid., p. 6231.

²⁸ U.S. Navy. "Effective Naval Leadership and the Code of Conduct," NavPers 15922, November 1958.

What now may seem to the members of this committee as a small thing, allow-Soviet equipment to come into the United States, will actually represent an irretrievable step from which further ramifications will flow. At the very least, a seed of doubt or a disposition to neutrality will be planted in the hearts and minds of many young people which can make them vulnerable in later years to the pressures and claims of superiority in behalf of the Communist ideology, whether this is pressed upon them under duress as in the case of prisoners of war, or whether it is nourished more circumspectly by their daily exposure through the press and other media to the Communist claims of superiority over the American way of life. It can hardly square with the goal of protecting our national security which forms the touchstone of the National Defense Education Act that from the funds called into use by its purposes there will be created a danger from which there can arise a receptiveness, even slight, by our young people to the claims of the Communist ideology.

By failing to restrict the use of the defense education funds which it makes available, the Congress can unwittingly participate in the first step of the process known to the Communists as progressive subjugation. This is simply a process under which by subtle implication, direct appeal, or both, the Communists try to undermine a person's faith in his fellow man, his country, his family, his religion, and in himself.

We are as one in this country as to Soviet Russia's goals of world domination, and the ultimate destruction of the United States and our way of life with its precious regards for freedom and human dignity. Where we sometimes do differ with each other is in the identification of seemingly small matters, the details of the Communist offensive, whether propaganda or economic, by which the Soviet Union pursues its plan of world conquest. It may be useful here to consider the duty which each of us is under to remain eternally vigilant and alert to act in these small matters as well as in the larger ones which more clearly involve Soviet Communist acts against our country. The U.S. Navy puts it this way, in its manual on the "Code of Conduct" (which should apply to each of us and not merely to our fighting men):

"In the past when Americans have had to fight in defense of freedom, the threat has been quite clear. Attacking armies raining death and destruction leave little room for doubt. The greater threat to freedom today—the Communist menace—is not always so obvious. For armed assault is only a *tactic* in the Communist war plan; often a lesser tactic at that.

"World War II was 'total war' in the sense that once the Axis powers launched their attacks, it was an 'all-out' affair. Sink or swim—there would be no turning back. Communist aggression is 'total war' in a much broader and more literal sense. For the Communist war against the rest of the world is constant and continuous. Subversion, infiltration, propaganda—and, of course, 'the breathing spell' with the pleas for 'peaceful coexistence'—all of these and more are parts of the Communists' long-range strategy for world conquest.

* * * * *

"Freedom is an *inheritance* for Americans of today—provided by the toil and sacrifice of those who founded this Nation, and built it. But freedom is neither gained *nor kept* by men who leave it for 'somebody else' to take care of such things. In exchange for his birthright of freedom, every American must assume the *responsibility for his own actions*, in every circumstance" (p. 48). [Italic quoted.]

And so it is in this problem of Russian scientific apparatus that we call your attention to the potential dangers which the use of this equipment in our schools poses in the ultimate formation of the character of the young people who attend those schools. In saying this, we do not impugn the quality or patriotism of the youth of America, but we cannot overlook the fact that many things go into the development of a man's character. As a result of the experiences of U.S. prisoners of war in the Korean conflict, our Armed Services have done serious and constructive thinking about the moral resources of our young people. Again, the Navy has described clearly for us the overwhelming importance of the factors which are brought to bear upon a person in the formative days of his youth:

"The development of character in a man is a never ending process. No man is ever all that he can or will be, until the day he dies. And, of course, character development begins in childhood, from the first moment a youngster becomes aware of things in the world about him. The influence of parents, teachers, play-

mates and many others will have much to do with the kind of character a young man has developed by the time he enters military service. * * *” (p. 53).

We have dwelt perhaps overlong on this subject because we believe that this, in the final analysis, is the most important aspect of the threat which is posed by the offering of Russian scientific equipment to our educational market.

(b) *By exposing the many exchange teachers from foreign countries teaching in our schools to a situation which would incorrectly imply Russian superiority over the United States in the field of science and technology.*—The propaganda effect of Russian science teachings equipment in American schools will also be registered upon the many teachers from foreign countries who teach in American primary and secondary schools under the international educational exchange program conducted by the Department of State. During the current academic year, for example, there are 166 foreign teachers from 13 foreign countries conducting classes in primary and secondary schools located in 34 States of the United States. These people contribute to better international understanding through their presence and instruction in American schools; they also take back with them to their native lands impressions about America. Notably, there are no teachers from Soviet Russia in this program.

In the contest between the United States and Russia for the moral and psychological allegiance of the peoples of other nations and to their respective positions of leadership, political philosophies, and ways of life, the consequences of equipping our schools with Russian science teaching apparatus could be detrimental because of the implication which such usage might suggest to many; namely, that Russia is in a position of leadership ahead of the United States in science education. It is not necessary to affirm the proposition that this impact upon exchange teachers in our midst would be clear and direct; it is sufficient to point out that an incongruous or disturbing impression can be generated by the use of such equipment because it is at least suggestive of an inability on the part of American science and industry to supply comparable items in competition with the Russians. The ridiculously low prices with which the Russians forced the entries of such equipment into the United States educational market would very likely not be communicated to these exchange teachers. The presence of such equipment in American schools would surely be a topic of discussion by these teachers when they return to their native lands, and it could be a source of disturbance and concern to them and their American friends during the months of their stay in this country.

These considerations are offered simply to indicate that the initial step of allowing Russian equipment to enter the United States under a U.S. Government subsidy in the form of grant-in-aid funds to State school administrators, would have ever-widening propaganda repercussions which can carry far beyond our own shores. The school administrators could not be blamed for purchasing such equipment—for the Federal Government itself, by its example in refusing to deny the Russians access to this sensitive market, would appear to condone or endorse such purchases.

To those who would contend that the importance of maximum efficiency in our national efforts to raise the level of our science education demands the use of Federal funds to purchase science teaching apparatus at the lowest price, regardless of its source, we would answer: Granting the importance of increased emphasis in science education, there are higher values of even greater importance to our Nation's welfare. The Navy's "Code of Conduct," quoted from above, states them well. Let us not lose our perspective in our national drive for continued scientific supremacy. With the editors of "Foundations of National Power" we shall do well to ponder these lines: ²⁹

"Our age is so absorbed by the scientific spirit, with its passion for exact measurements, that we almost come to believe that because the cultural side of human life eludes those measurements, it can be divorced from the search for truth, or at least be shunted to a sidetrack, while the express goes through on the main line. Every contribution of the physical and social sciences to the problems of society is to be welcomed; but to expect those sciences to meet the spiritual hunger for hope and belief and beauty and permanent values is a form of superstition as withering as any which humanity has thus far outlived. * * *."

²⁹ "Foundations of National Power," D. Van Nostrand Co., Inc., revised 1951, p. 446, quoting from "We Are Living in Two Centuries," by R. B. Fosdick, in the New York Times magazine, Nov. 24, 1946.

Our freedoms, our liberty, our national respect for the dignity of man—all alien to the Communist ideology—are our heritage of permanent values. Let our vigilance in their defense be equal to the small task of imposing upon ourselves the self-discipline of prohibiting the use of our tax revenues to usher the enemy's indicia of claimed scientific superiority into our children's midst.

SUMMARY AND CONCLUSION

(1) Congress found in the National Defense Education Act that secondary school programs for science instruction must be expanded to safeguard the national security against the forces of totalitarianism. Insufficient funds have been responsible for inadequate science teaching facilities in the past. A major step in eliminating this deficiency is the Federal grant-in-aid program for purchasing science teaching equipment. These funds will more than triple the funds now available to the Nation's secondary schools for this use.

(2) Expansion of domestic facilities for research, development, and production of science teaching apparatus is a vital part of the Nation's educational resources to prevent technological eclipse by Soviet Russia. The educational market has been too small in years past to justify domestic producers in mass-producing equipment for secondary school use, or in emphasizing the development of new products. The Federal grant-in-aid program under the National Defense Education Act represents a dynamic influence which, for the first time, will provide the small business organizations who comprise the industry with the economic incentive to grow and innovate in step with the expansion of America's educational resources.

(3) With astonishing speed following the establishment of the Federal program, Soviet Russia made 96 separate items of surplus science-teaching apparatus, mass-produced behind the Iron Curtain, available for sale to secondary schools in the United States at fantastically low prices, averaging one-fifth the prices of comparable U.S.-produced equipment. The equipment is comparable in quality to U.S. equipment.

(4) U.S. engineers who visited instrument manufacturing plants in Russia in August 1958 assert that Soviet costs of mass-produced scientific apparatus are in the same range as U.S. costs for similar equipment. Therefore, Russian equipment offered to the U.S. educational market at prices averaging one-fifth those of the comparable U.S. equipment is being deliberately used by the Soviets for economic warfare or propaganda purposes. (Because of the centralized control in Russia, the Soviet Union is able to price its goods for sale in U.S. markets at any level which suits its purposes, as shown in the recent cases of aluminum and tin.)

(5) Unless some adequate defensive measures are used, the small business organizations comprising the domestic industry producing science-teaching equipment will be severely injured and their growth, so essential to the national defense educational program, will be retarded. The Federal funds involved will be used to score a propaganda victory for the Soviets. By placing science equipment in our public schools, the Soviets will be able at times and places of their own choosing to proclaim to the world that her technology is so superior that she is equipping the schools of the United States with science equipment, and that Soviet Russia is benevolent to the United States because, by supplying U.S. schools with scientific apparatus, she is making it possible for the schoolchildren of America to learn the sciences. The presence of Soviet science apparatus in their classrooms could adversely affect our schoolchildren by creating the seeds of doubt in them as to the technological ability of their fellow Americans and whether we as a Nation are serious in our determination to resist the Soviet technological-economic-propaganda offensive.

(6) Existing U.S. laws can't check this Soviet economic-propaganda offensive. The Battle Act and the Export Control Act apply only to the exports of strategic goods, not to imports from Iron Curtain countries. The Antidumping Act and the countervailing duties law require for their operation facts which either do not exist in the case of Russia or can be effectively controlled by a totalitarian state. There are no "prices" or "production costs" in Russia; it is impracticable for U.S. Treasury representatives to secure such information from behind the Iron Curtain; and the Soviet Union, in any event, is able to set "prices" or "costs" as high or as low as necessary to make our laws ineffectual.

(7) The full tariff duties applicable to science apparatus from Russia (40 percent are ineffectual because the landed cost of the Russian apparatus with

duties paid is still one-fifth or less than that of the price of comparable U.S. equipment.

(8) The only timely and effective remedy to defeat this Soviet economic-propaganda offensive is a limitation in the appropriation bill providing funds for the National Defense Education Act which declares that they may not be used to purchase science-teaching equipment from Soviet Russia.

APPENDIX

PARTIAL LIST OF NEW ITEMS OF SCIENCE-TEACHING APPARATUS DEVELOPED AND MARKETING BY AMERICAN PRODUCERS SINCE 1946

1. Projection meters.
2. Hydrostatic pressure apparatus.
3. Index of refraction of gases apparatus.
4. Phase demonstrator.
5. Field mapping apparatus.
6. Hart atomic model.
7. Molecular model.
8. Vacuum tube for studying thermionic emission.
9. Elementary replica gratings.
10. Electronic electrometer.
11. Lab-jack.
12. Micro lab-jack.
13. Spectrometer accessories for force table.
14. Millar observoscope.
15. Electronic relays.
16. Brownian movement viewer.
17. Mitac gyroscope.
18. Transistor demonstration.
19. Kinetic theory apparatus.
20. Microwave optics apparatus.
21. Infinite resistance voltmeter.
22. Converter, a.c. to d.c.
23. Mobile laboratory.
24. Temperature coefficient of resistance demonstrator.
25. Forces in thermal expansion.
26. Diffusion cloud chamber.
27. Interferometer.
28. Radio activity demonstrator.
29. Current balance.
30. Triode demonstrator.
31. Diffusion cloud chamber.
32. Filmloops on radioactivity.
33. Radian and circle demonstrator.
34. Dissectible motor.
35. Maxwell's top.
36. Demonstration micrometer caliper.
37. Plastic meter stick.
38. Lecture-table stopclock.
39. Van de Graaff-type generator.
40. Insulated sphere.
41. Magnetizer.
42. Log and trig function chart.
43. Log and trig function cards.
44. Radium standard kit.
45. Mounted resistors.
46. Chart of radiant energy spectrum.
47. Ceramic magnets.
48. Planimeter.
49. Miniature slated globe.
50. Crane boom derrick set.
51. Overhead projector.
52. Wheatstone slide-wire bridge assembly.
53. Recording barometer or barograph.
54. Filmloops on wave motion, set 2.
55. Tuning forks, equally tempered scale.

56. Tuning forks, octave series.
57. Temperature-coefficient-of-resistance apparatus, thermistor and copper.
58. Cathode ray oscilloscope.
59. Demonstration projection vernier.
60. Stopclock, electric, one-tenth second.
61. Anemometer, portable.
62. Electronics training kit.
63. Transistor circuit kit.
64. Basic electrical circuit kit.
65. Vacuum tube tester.
66. Variable transformer, 0 to 132 volts, 165 volt-amperes.
67. Variable transformer, 0 to 135 volts, 400 volt-amperes.
68. Variable transformer, 0 to 140 volts, 500 volt-amperes.
69. Variable transformer, 0 to 135 volts, 2 kilovolt-amperes.
70. Cordinate system slides.
71. Windscope.
72. Replica diffraction grating film, mounted.
73. Replica diffraction grating film, unmounted.
74. Interference diffraction resolution kit.
75. Extra slitfilms, glassbound.
76. Demonstration Venturi apparatus.
77. Chalkboard graph chart, polar and rectangular coordinates.
78. Van de Graaff-type generator, with variable-speed motor.
79. Discharge sphere.
80. Series ST—Standard teaching microscopes.
81. Series F, C, and T—Monocular and binocular laboratory microscopes.
82. Wide-field microscope.
83. Dynoptic series of inexpensive polarizing microscopes.
84. StereoZoom series of stereomicroscopes.
85. Tri-Simplex microprojector.
86. Speed-Matic microprojector.
87. Balomatic 2- by 2-inch slide projector.
88. Spectronic 20 colorimeter-spectrophotometer.
89. HRR color test.
90. Projection magnifier (two models).
91. Test chart equipment.
92. Vision screening test.
93. Near point reading test equipment.
94. Projector.
95. Scholars microscope (six models).
96. Laboratory table illuminator.
97. Stereoscopic microscope (eight models).
98. Overhead projector.
99. Opaque projector.
100. Laboratory microscope (10 models).
101. Hand refractometer.
102. Micro substage illuminator.
103. Micro opaque reader.
104. Rotary microtome.
105. HB meter.
106. Photomicrographic camera.
107. Advanced laboratory microscope (four models).
108. Rx master phoropter.
109. Eikonometer.
110. Radiuscope.
111. Motorized eye examining and treatment chair.
112. Illumination controls.
113. Electric instrument table.
114. Trial frames.
115. Perimeter equipment.
116. Screening equipment.
117. Troposcope.
118. TV trainer.
119. Ful Vue ophthalmoscope.
120. Ful Vue retinscope.

- 121. Ful Vue diagnostic instruments.
- 122. Ful Vue otoscope.
- 123. Binocular indirect ophthalmoscope.

NOTE.—In addition to the above items which have been added to the product line of American producers since 1946, a great many items of standard laboratory apparatus have been redesigned by their American producers or are in process of redesign, to improve both appearance and performance.

GENERAL STATEMENT

Senator HILL. You go right ahead now, sir, in your own way.

Mr. STEWART. We recognize the tremendous importance of the National Defense Education Act and believe that it bodes fair to stand with the Hill-Burton Act as a permanent record of the achievements of yourself and the members of this committee, the Senate Committee on Labor and Public Welfare, and the Congress.

It is because of the importance of this act that we have sought this opportunity to draw your attention to one problem that exists in connection with the funds for defense education activities.

May I say that I will undertake to outline our thoughts as briefly as possible under these general headings.

SECTIONS OF TESTIMONY

First, well understanding that you, Senator Hill, chairmaned the hearings which resulted in the National Defense Education Act, nevertheless I shall briefly set forth some of the highlights of that act for perspective.

Senator HILL. All right, sir.

Mr. STEWART. Second, we will discuss the nature of the educational market, then the market for scientific apparatus for secondary schools, then the domestic industry, its size and the economic considerations that impinge upon it, following which we will describe the dimensions of the threat which brings us here, why we do not believe that any existing Federal laws are adequate to this emergency, and then the specific proposal that we advance for the consideration of the subcommittee.

PURPOSE OF ACT

The National Defense Education Act, Mr. Chairman, was conceived in a moment of intense awareness of an emergency which threatens our country. In an American way the Congress fashioned an American remedy: the Federal Government to provide assistance to the public school systems of our Nation so that they could intensify the resources for science education at the secondary school level.

The Senate Labor and Public Welfare Committee, headed by yourself, and the Congress, recognized that not only would funds be necessary to improve the appeal of teaching science as a vocation, through scholarships, fellowships, and other awards, but the Congress also recognized that an indispensable part of such a program of keeping the United States ahead of Soviet Russia in the development of technological knowledge was providing means for adequate science teaching equipment for the schools. Title III of the National Defense Education Act authorizes a grant-in-aid program for the purchase of equipment for teaching modern languages, science, and mathematics.

ESTIMATES FOR EQUIPMENT

The estimates upon which the dimensions of that title III program were fashioned, Mr. Chairman, were estimates based upon the cost of American equipment.

This association worked, cooperatively, with the U.S. Office of Education in providing these estimates: what it costs to equip a science classroom for biology, physics, chemistry, and general sciences. The amount authorized to be appropriated by the National Defense Education Act, therefore, was tailored upon an idea of an American cost because the American industry is part of the teamwork required to keep the United States and its science education effort ahead of Soviet Russia.

Mr. Chairman, the ink was scarcely dry upon that great act when arrangements were made by a U.S. import house, the Ealing Corp., to visit Russia and discussions were held with the trade export organization of the Russian Government to explore the exportation of surplus Russian science teaching equipment to the United States for sale to our schools under the Federal grant-in-aid program.

IMPACT OF FOREIGN EQUIPMENT

In a science convention held in New York City in January 1959, the Ealing Corp. exhibited a number of items selected from a catalog of 96 items made available by Soviet Russia for this program. The statements of the President of the Ealing Corp. and of U.S. educators who examined the equipment and had discussions with the import house are to the general effect that these articles will be sold in the U.S. market at prices which range about one-fifth of those of the prices of comparable U.S.-produced items.

The executive secretary of the apparatus committee of the American Association of Physics Teachers in a statement to the press said that this Russian science teaching apparatus was being subsidized for export to the United States so heavily by the Soviet Union that it could be sold to the United States at prices one-tenth below those of comparable U.S. equipment.

NATURE OF APPARATUS INDUSTRY

Mr. Chairman, let us consider the nature of the industry upon which the impact of such a pricing campaign would be registered.

There are two sections of the Scientific Apparatus Makers Association immediately and directly concerned: They are the laboratory apparatus and optical sections. They consist of 147 business organizations producing or marketing scientific teaching apparatus in this country. Of that number, Mr. Chairman, only 7 out of 147 are large enough to be listed in the Standard & Poor's Directory. The other 140, therefore, are necessarily small business organizations. They are not producing at a level and the virility of their economic enterprise is not such that they have the capacity to meet this type of price offensive. The seven published corporations in 1958 experienced profits after taxes as a percentage of sales ranging from no profits at all for one company to 3.2 percent profit or less for six of the seven.

SMALL BUSINESS IN FIELD

The 140 small business organizations that are not publicly held and for which financial data is not available in the public domain have authorized in the past a statistical program conducted by this association in cooperation with Arthur Young & Co., accountants. A selected group of companies have submitted to Arthur Young & Co., confidential data which is the basis of that study. I can tell you, Mr. Chairman, that the small business organizations in these two sections experienced in 1958 a profit ratio, profit in proportion to sales after taxes of an average of 3.2 percent.

Now, the instruments and related products industry of which these companies are a small part in 1958, as reported by the SEC, has a profit ratio of 5.1 percent. I think you can see, therefore, that these small business organizations are not making profits at a rate which gives them very much flexibility in meeting the type of price competition involved here.

Mr. Chairman, if it is not possible for the domestic industry which produces science teaching apparatus to expand in harmony with our expanding educational resources for science, under the National Defense Education Act, then we will not have a self-contained, well-rounded, adequate program for keeping this country ahead of the Soviet Union.

RUSSIAN CAPABILITIES IN PRODUCTION

A word about Russian capabilities: The president of the import house, the Ealing Corp., reported rather widely after his trip to Russia—and this was reported in the press—that Russia is mass-producing science-teaching apparatus. He stated that shipments that would be made to the United States would be made out of surplus stock, and he added that he saw warehouses bulging with this apparatus.

A group of scientists, 14 in number, visited the Soviet Union, quite apart from Mr. Grundle's visit in August of 1958, and they were allowed to visit nine instrument-manufacturing plants. Because they were qualified and experienced technicians in this field of manufacture, they were able to ask searching questions of the plant managers and other technicians with whom they came in contact.

It is their judgment, based upon their actual visit to Russia and their visit to these nine plants, that the Russians are not ahead of us technologically speaking in the manufacture of scientific apparatus. In fact, they have made so much progress by copying American apparatus and German apparatus, but principally American apparatus, and organizing with great efficiency for the mass production of a selected range of items of that apparatus.

Secondly, it was their observation, based upon these conversations and these visits, that the Russian costs, to the extent that they could be determined from conversations, are in the same ball park as American costs. They are not producing at a significantly lower cost. Though their production is mass production and the production in this country is not mass production, the range of the cost is about the same.

Therefore, when we find the Soviet Union, through its state trading export organization, making available a broad range of science-teaching apparatus for export to the United States at prices which, after payment of duty and importer's markup, will average one-fifth of those for comparable American items, we have a deliberate destructive pricing program dedicated and carried out for political and propaganda purposes.

It seems anomalous to us, Mr. Chairman, that a program conceived in an emergency, created by Soviet Russia, supported by Federal funds, could be used so that those funds in part would be sent to Moscow to strengthen the economic resources of that country and to limit the economic potential of this country to meet that emergency. We think that when this problem is understood by this committee it will not wish for such a result to follow.

U.S. SMALL BUSINESS ENTITLED TO CONSIDERATION

This industry, this small business industry, is also entitled to the consideration which the Small Business Act of 1958 expressly recognizes. In that act the Congress said that the ability of small business enterprises to engage in free competition for access to the markets of this country was important to the national security of the United States. The United States will not allow any concentrated power in the hands of private people to be used in a destructive price campaign to injure small business or any other sector of our competitive economy.

Will the United States allow the concentrated power enjoyed by the Soviet Union to be used with impunity against what is essentially a small business industry?

Mr. Chairman, this industry has not been backward in offering new products, in gearing its operations at a level adequate for the expanded science education effort in this country. In an appendix to my statement I set forth a partial list of 123 science teaching apparatus brought out by this industry since World War II.

We have taken the liberty, Mr. Chairman, in cooperation with your staff, to place in the anteroom to this hearing chamber selected samples of science teaching apparatus and we have here technical representatives of our companies to explain them and their significance to you, for one purpose, to demonstrate to you that this is not a backward industry, lacking in imagination or resources, to bring out equipment geared to the type of science education program required by this country.

REQUEST FOR PROVISION IN 1960 BILL

What it is that we would wish the committee to do? We feel that the only measure which will be effective in countering this destructive price competition by the Soviet Union will be a provision in the 1960 appropriations bill for the Department of Health, Education, and Welfare which would prevent any of the funds appropriated for defense educational activities from being used for the purchase of mathematics, science, or modern language teaching equipment produced in the Soviet Union or other Communist-dominated country. I have the text of such an amendment which I will read into the record at the conclusion of my remarks.

QUESTION OF EFFICACY OF PRESENT LAWS

Why will not other U.S. laws counter this offensive?

Mr. Chairman, one of my specialties is the practice of customs and tariff laws. This is a matter on which I believe I can qualify as an expert. The antidumping of the United States which is frequently mentioned as an available remedy will not apply to imports from Soviet Russia because that act depends for its operation on being able to determine either foreign market prices which fairly reflect the market value of the merchandise in question, or lacking such data, something called constructive value, which really is the cost of production of the goods in question. Now, market prices simply do not exist as such in the Soviet Union. If they do, their ascertainment is so much under the control of the Soviet Government organizations that they can arbitrarily set them at levels which would defeat any finding of dumping by our customs authorities. Lacking foreign market prices, it is not possible to determine cost of production; first, because the Russians do not have comparable concepts to those followed in a free competitive economy; and secondly, the inplant investigations required by our Treasury representatives to verify such data are simply out of the question in the case of the Soviet Union.

VIEWS OF STATE DEPARTMENT

At this point I would like to read two statements very briefly—one by Secretary of State Dulles, in his last appearance before the Senate Foreign Affairs Committee, and the other by Under Secretary of State Dillon—which are eloquent on this problem.

At page 21 of my prepared statement I set forth the text of a reply which Secretary Dulles made to Senator Fulbright who inquired of the Secretary about the Soviet economic offensive and the view of the Secretary on it. Mr. Dulles stated:

I consider this danger a very grave one, indeed, because under their type of economy they are not concerned at all with prices—as to whether they show a profit, whether they show a loss. It is all part of their political effort, and if they desire to do so—whether it be merely out of a desire to get foreign exchange or whether it be a desire to conduct economic warfare—they have a great capacity for damage.

It is a very serious threat, because you can see a possibility that private concerns, one by one, can be put out of business. It is comparable to the situation when you had a very big combine combating the small grocery store, drugstore, and where, through the so-called loss-leader operation, they would sell one thing at way below cost to attract customers, and put the other little concern out of business, and when they put it out of business—then the price goes back again.

This loss-leader operation can be conducted by the Communist world, and we have got to find the answer to it.

Mr. Chairman, the quotation by Under Secretary Dillon is at page 36b of my statement and it is specifically geared to the question of why our tariff laws are not adequate to prevent this type of economic defensive.

Senator HILL. What page did you say, Mr. Stewart?

Mr. STEWART. 36b.

Senator HILL. 36b.

Mr. STEWART. Toward the bottom of the page, indented and in quotes.

Senator HILL. I see it, sir.

Mr. STEWART. Under Secretary of State Dillon said:

* * * all aspects of the Soviet economy are under the total control of the government and the Communist Party, and are directed in accordance with a centrally determined plan. * * *

This is a central fact the importance of which cannot be overemphasized. * * * no frame of reference exists by which internal prices and costs can be measured against those in the outside world. * * * Tariffs and trade controls, and such concepts as most-favored-nation treatment and dumping, lose their conventional meaning when applied to this type of economy. * * * Foreign trade is used as an instrument which is manipulated to serve the purposes of the internal economic plan and the requirements of foreign political strategy.

Mr. Chairman, I think that the State Department should remember the words of Secretary Dulles and Under Secretary Dillon in advising the committee whether or not our tariff laws are adequate to check the Soviet economic offensive in the field of science teaching equipment.

OTHER LAWS INOPERATIVE

The countervailing duties law which has also been mentioned by some will not operate for much the same reasons as the antidumping law. It is necessary to make a quantitative determination of the amount of bounty or grant which is conferred by the Soviet Union upon the export of goods to the United States. But, Mr. Chairman, the entire Soviet economic system is marshaled so as to bring to bear the capacity to price goods at any level at any particular moment of time that they choose for their purposes. It is impossible to determine in dollars and cents the amount of a particular bounty or grant.

The Antidumping Act and the countervailing duty laws are powerless to check this threat; the customs duties averaging 40 percent ad valorem are also ineffectual because they are applied to the invoice price set by the Soviet Union in selling equipment to this country. The very prices that are being quoted by the Ealing Corp. after payment of duty which still range one-fifth below those of U.S. products show that the duty is virtually useless as a deterrent to these Soviet practices.

IMPACT OF "MADE IN RUSSIA" STAMP

Mr. Chairman, there is an additional aspect of this Soviet campaign which we think should be called to the attention of the committee. In calling it to your attention we are well aware that we can be criticized for wrapping ourselves in the flag; nevertheless, we are willing to be exposed to this criticism because of the transcendent importance of the issue. And that is this, Mr. Chairman:

The whole thrust of the National Defense Education Act is to provide means, incentive, inspiration to the young people of our country to study science to gear their intellect to the effort which will keep us ahead of the Soviet Union. But because of the very fact that they are in high school they have impressionable minds, and for the Federal Government to use its taxpayers' revenues to place in their midst permanent-type equipment marked "Made in Russia," we think runs the risk of planting the seed of doubt in the minds of some of these young people as to whether the United States is competent technologically and whether our Federal Government itself is really as concerned about America's standing fast against the Soviet challenge as they sometimes would have us believe.

In saying this we would not deprecate in any way the loyalty, the patriotism of the high school children of our country. But, Mr. Chairman, by the very fact that they are receiving an education they have impressionable minds, and we think that this Government should be very careful about allowing Soviet equipment so marked to be placed in the hands of our high school children.

LIMITATION NOT INTERFERENCE WITH STATE

We point out in this respect that placing a limitation upon the use of the funds of the sort we advocate is not Federal interference with States rights from an educational standpoint. Mr. Chairman, the National Defense Education Act itself placed limitations upon the funds which are turned over to the States. They either must be used for scholarships or fellowships or for certain types of equipment. The money is not simply turned over at large to the States for any educational use that they see fit. Secondly, under the student loan program although it is a controversial subject, non-Communist affidavits are required on the part of applicants. This shows that at the time the act was passed the Congress in its wisdom understood that as a weapon to be used in competing with Russia this act should not be used as means of giving strength and support to Soviet Russia.

TEXT OF PROPOSED AMENDMENT

Mr. Chairman, I would like to read into the record at this point the specific text of the amendment which we advocate.

Beginning at line 2 on page 19 of the bill, H.R. 6769, as pending in the Senate, we would add the following words:

No part of this appropriation shall be available for the procurement of any article of equipment (suitable for use in providing education in science, mathematics, or modern foreign language) produced in whole or in part in the Union of Soviet Socialist Republics, Communist China, or any nation or area dominated or controlled by the foreign government or foreign organization controlling the world Communist movement.

Mr. Chairman, I cite to the committee as a precedent for this type of provision in an appropriation bill, section 625, Public Law 85-724. That is a limitation in the Defense Department appropriation act which is approved by the Senate Appropriations Committee every year and enacted into law by the Congress requiring certain appropriated funds to be used to purchase articles produced in the United States. We do not go so far. We say let this equipment be purchased anywhere in the free world, but let it not be purchased from Soviet Russia. Of course, in saying that I point out that we enjoy the regulatory effects of tariffs on imports from free world countries. But this is nothing new, Mr. Chairman. This insures that which is impossible in the case of trade with Russia, fair competition with foreign producers that enjoy a greatly reduced labor rate than that prevailing in this country. I will say, also, in this regard, that these rates have been considered time and time again by the State Department under the administrative machinery for adjusting our tariff rates and because of the overwhelming importance of this industry, the rates have been relatively free from massive reductions in the past.

Mr. Chairman, in conclusion, I thank you in behalf of our industry for hearing us and for entertaining our views. If this commit-

tee in its wisdom decides that some larger public good requires that the Soviet Union be allowed to place science teaching apparatus in our public schools at prices that this industry cannot compete with—that no industry can compete with—then let the issue be clear, let it be on the basis of an affirmative decision by this committee and not on the basis of allowing the issue to go by default to some other sovereign power such as a school administrator in any of the 49 States.

Thank you, Mr. Chairman. If you have any questions I would be delighted to respond to them.

Senator HILL. Mr. Stewart, you made a very strong presentation.

ECONOMIC AGGRESSION OF U.S.S.R.

As was brought out in Secretary Dulles' statement and Mr. Dillon's statement and yours, too, we have this problem of calling it economic aggression on the part of the Soviet Union.

Have you thought in terms of general legislation or general legislative policy on this whole question? It will deal not only with the specific matter that we have been discussing but this whole question of the economic aggression.

Mr. STEWART. Yes, Mr. Chairman, I have. I am familiar with the bills that have been introduced in Congress on this subject beginning with legislation introduced by Congressman Curtis of Missouri in the other House early in the session, and a resolution by Senator Mansfield that the problem in general in large terms be studied. We are met, Mr. Chairman, at the outset with this difficulty. Under the constitutional decisions pertaining to the permissible delegation of legislative power by the Congress to an executive department, we recognize that there must be an intelligible principle, some primary standard stated in the law which will guide an administrative agency in filling up the facts and determining exactly what regulations will be imposed.

Since this is an economic problem, the intelligible principle needs to be stated in economic terms, whether sales are taking place below some fair norm, what it costs actually to produce the goods in Russia, what it would cost another country of Europe, let us say, with somewhat comparable standards of living, to produce this item. Wherever we turn we are faced with the necessity of framing an intelligible standard in terms, in economic terms. Once we realize that, then we realize that in the case of the Soviet Union findings of fact simply cannot be made. An investigation into economic facts in the case of the Soviet Union is almost necessarily precluded by two things. The very limited access which that government allows to governmental representatives of other countries for investigatory purposes and, secondly, their use of concepts which differs so markedly from those practiced in the free world that we do not have a common frame of reference economically speaking.

Finally, no matter what set of criteria we would frame, the total control over the Soviet economy would allow them in a particular case to control the economic criteria we have selected so that the import in question would not be subject to regulation under the standard we have set in our laws.

CONTINUED STUDY NEEDED

In cooperation with other industries who are farsighted enough to see this as a problem of tremendous magnitude I am continuing to study this problem. But I think that no one has yet devised a remedy which is readily available in the framework of general legislation which can meet this problem. And in this particular instance, Mr. Chairman, once these funds are appropriated, made available to the U.S. Office of Education, and apportioned to the States, the damage will have been done. So attractive are the prices at which the Russian equipment can be offered, whether by the Ealing Corp. or some other U.S. importer, that the schools will inevitably order the equipment, particularly since the issue has been presented to the Congress of the United States and its failure to act would well be interpreted as approval by the Congress of the purchase of this equipment.

Senator HILL. You speak of the Ealing Corp. They have a representative here who will speak for them. The Chair would be delighted to see your equipment here. Do you have any particular preference as to whether we hear from the Ealing Corp. before we look at the equipment or not?

Mr. STEWART. I think it would be only fair for you to hear fresh on my testimony the representative of the Ealing Corp.

Mr. Chairman, our technical representatives are prepared to remain here after the hearings have concluded to explain this equipment to you and anyone else who may be interested.

Senator HILL. All right. If this procedure is perfectly agreeable, we will hear then at this time from the Ealing Corp., Mr. Paul D. Grindle, president of the Ealing Corp., of Cambridge, Mass.

All right. We will have your statement appear in full in the record just as we have Mr. Stewart's and glad to have you now make any statement you see fit, sir.

THE EALING CORP., OF CAMBRIDGE, MASS.

STATEMENT OF PAUL D. GRINDLE, PRESIDENT

HISTORY OF TRANSACTIONS WITH U.S.S.R.

Mr. GRINDLE. I am the president of the Ealing Corp.. My company is importing from Russia the educational scientific equipment referred to in Senator Bridges' proposed amendment. I am appearing before this committee in opposition to this amendment.

I will first state briefly the facts about this transaction. My company was formed in 1954 to import and distribute instruments for science education. We are merchants, as opposed to agents or representatives, in that we buy outright and sell for our own account. We are a tiny business, but growing. We import mainly from England and Germany.

We formed our company because we believed that American education was being badly served by its equipment suppliers. A superficial survey indicated that there was far better equipment available in the world than was being offered in the United States. It appeared that it would be profitable to seek out this equipment and offer it in this market.

In the past 5 years I have made numerous trips to Europe seeking sources for educational equipment. I paid little attention to Russia because it was then fashionable to consider her science education capable only of turning out technicians.

In October 1957, sputnik appeared and prudent business judgment dictated that I should find out all that I could about Soviet science education. In January 1958, *Physics Today*, the journal of American physicists, had on its cover a picture of a Soviet science classroom showing the first that I had seen of some modern Russian science teaching equipment. It appeared most interesting.

I wrote to the Department of Commerce asking if there is any restriction on importing from Russia. I was told that there is not. I next wrote to the Russian Embassy in Washington and was referred by them to the Amtorg Trading Corp. in New York, the agency that handles Russian commercial interests in the United States.

Amtorg said that they would inquire if the equipment was available for export. After 2½ months I received a list of 94 pieces of equipment which they were prepared to export, with brief descriptions but no prices. I asked for complete specifications and prices on 26 items chosen at random from the various categories. The quotation I received 2 months later. The specifications and prices seemed so interesting that I decided to go to Moscow immediately to examine this equipment.

VISIT TO MOSCOW

Raznoexport, the trading agency that handles these products, was not expecting me. I was told by telephone on Monday that I could come by at 5 p.m. on the following Thursday. This was obviously not satisfactory so I immediately found my way to their office and said that I wanted to see the boss and that I would wait until this was arranged. It took a half hour to locate him and an hour to locate the file. I am telling you this detail only to point out that the Russians did not seek me out to foist these instruments upon me in a propaganda move. If it was a propaganda move, it was at best an exploitation of an original contact definitely made by me.

The following day I was turned over to officials of the Ministry of Education. Note that what I have to say now refers only to science teaching equipment used in the Russian school system up to college level. I was told that science equipment is developed within the Ministry and then sent out to various factories to be manufactured. This equipment is then sent to one of 85 distribution depots across the country from which it is distributed into the school system.

I examined in detail the two depots that serve Moscow. I am qualified to judge this equipment and I considered it to be extraordinarily good. I feared that the samples in the showcases might, however, be just prototypes. There were many unopened crates lying around that, I felt certain, had just arrived from the factories. I had some of these opened. The equipment inside matched exactly that on display and matched the specifications quoted to us.

EXTENT OF RUSSIAN EQUIPMENT BUSINESS

It began to seem apparent that Russia was moving into her schools a flood of high quality, useful science teaching equipment. It was possible to make some guesses on the size of the flood. Each instrument

has with it an instruction booklet printed in a uniform format. On the back page the print order is stated. The equipment that I was examining was evidently being manufactured in lots of from 4,000 to 20,000 units. In the rest of the world this equipment is manufactured by an essentially hand industry.

At the larger of the two Moscow depots I asked about volume. I was told that in 1957 that depot alone did 35 million rubles of business. Certainly in this equipment the ruble has a value of 4 to the dollar. This totals then about \$9 million. By taking rough population distributions it would seem that Russia placed in her schools in 1957 about \$200 million of science teaching equipment. The largest responsible estimate that I know for the United States for the same period is \$6 million. The factor is 35 to 1.

I ordered a sample of each of the 26 items on which we had been quoted to be flown to the United States. I returned home.

PRICES ON EQUIPMENT

It was now essential for us to seek responsible advice. The prices of the equipment was startling. The hand rotator cost \$3 compared to the American model selling for \$47. The projector cost \$15 and an equivalent American model would cost approximately \$300.

We asked qualified engineers what the cost would be for this equipment manufactured here in the United States in quantities of from 10,000 to 20,000. Their guesses indicated that spectacular savings could be made and the Russian prices started to become more believable.

Economists pointed out that factors peculiar to Russian accounting must also be considered. For example, no interest is charged on the capital plant. Engineering and tools are amortized against the domestic production and any run-on needs only be priced to recover the bare cost of converting the raw material into the finished product. The price carries no burden for advertising or distribution.

It was determined that, using the Russian ruble price list with which this equipment is sold to schools, we had received about 9 rubles for each dollar. This is of course opposed to the official rate of 4 to 1 but compares with the tourist rate of 10 rubles to \$1.

NOT DUMPING TRANSACTION

Economists at Harvard specializing in Russia examined the facts and advised us that in their opinion, this sale of scientific instruments represented a profitable business transaction for Russia. They commented that in all of their studies they had found only two isolated cases of what they considered to be true dumping. They carefully define the word "dumping" as being the sale of goods by Russia for foreign currency which is then used to purchase goods that can be made more cheaply in Russia. They point out that in a state economy such as Russia's it is difficult to assess individual transactions for profitability. For example, it is a profitable transaction for Russia if she sells a product for 4 rubles that cost her 5 rubles to manufacture as long as she buys with this 4 rubles that she receives something that would have cost her 6 rubles to manufacture herself.

We became convinced that this was a bona fide commercial transaction as free of propaganda implications as any trade for Russian

manufactured goods could be. We felt that it was reasonable to expect a continuing supply of these goods at these prices.

TEACHING VALUE OF GOODS

We then had our judgment confirmed on the teaching value of the goods. About 200 science educators were invited to examine the equipment in a series of private meetings. This included the outstanding physics teachers on the east coast among whom were six Nobel Prize winners. Their opinion was unanimous. Comments ranged from "unbelievable" to "embarrassingly good." Without exception, these educators urged us to place this equipment on the American market.

We then decided to import and vigorously sell this Russian science teaching equipment.

TRANSACTION FOR PROFIT

Our basic reason was simple; it was to make a profit. Our business is trading. I am a New Englander and I am typical in that I really understand and believe in only a few simple rules. The business rule that I understand above all others is that if you can buy right you can sell right. I had devoted considerable time, energy, and money to seeking out and opening up this new source. I was then and still am thrilled to have found a new source of goods with which I can rock my competitors back onto their heels. This is the ultimate object of trading alone as I understand it.

However, nobody could be so irresponsible to be unaware of the propaganda benefits that could accrue to Russia. This, in our minds, had to be balanced against the good that might be done for American science education by bringing to national attention the condition of the educational instrument industry in the United States today. We felt then and we still feel that there is a grave danger that the millions of dollars of our Federal funds about to be spent for scientific teaching instruments will merely place in our high schools outdated, obsolete, antiquated junk. I propose to document this danger after bringing you up to date on the commercial transaction.

EQUIPMENT PURCHASE ORDER

We assembled a purchase order for some 6,000 units of this Russian equipment costing about \$40,000. This order did not include any microscopes. When we had them examined and tested they proved to not be as good value as microscopes of Japanese manufacture. We feel the Russian microscopes would not be competitive in the United States market against the Japanese equipment being imported.

We sent this purchase order to Raznoexport asking for a delivery date on the 6,000 units of equipment. We had expected this to take nearly a year and were shocked to receive a cable offering 90-day delivery. We could not prepare for sales in this period of time so, after considerable negotiation, we placed a firm order for about a quarter of this amount and propose to reorder like quantities for essentially off the shelf delivery. We have opened a letter of credit with the State Bank of the U.S.S.R. in Moscow and are now waiting for our first volume shipment that should arrive within the next few weeks.

We have publicly exhibited this equipment only once. This was at a meeting of the American Association of Physics Teachers in New York at the end of January. Our illustrated catalog of this equipment will not be ready for some time. We have distributed only a few hundred copies of a leaflet without pictures giving bare specifications and prices of this Russian equipment.

RESPONSE FROM TEACHERS

The response of the science teachers to the availability of this equipment has been overwhelming. Over 1,200 of them have written to us from every State in the Union. Not one has criticized this move and their approval has ranged from a matter of fact nod to embarrassing eloquence. Fifty-three American public and parochial high schools and colleges have already placed firm purchase orders with us to buy this Russian equipment.

SOURCE OF CRITICISM

Against this widespread approval from the science educators of America there has come a steady drumfire of attack originating from a single source, that is the Scientific Apparatus Makers Association, the lobbying group that represents some of the American instrument manufacturers but all of the American laboratory supply houses who merely distribute goods.

We had of course realized that we were not entering a popularity contest in certain segments of American business but we were surprised at the viciousness and irresponsibility of the SAMA attack. We felt that we should learn something about this organization.

SAMA ATTITUDE ON TARIFF

An article entitled "The Story of SAMA" is given to prospective members. It states that the organization was formed to attempt to change the basic tariff law to include educational institutions which had historically been exempted from the payment of duty on scientific instruments. They boast that they were successful in 1922 in making this change after 4 years of effort. Two sentences later they point out that—

Since 1922, tariff rates on most of the industry's products have been increased twice * * *.

Later they say that for some segments of their organization tariff matters continue to be the most pressing problem with which SAMA copes.

We learned that for more than one-half of SAMA's entire existence it was presided over by a partner of the Central Scientific Co., the largest supplier in the United States of educational apparatus and that recently the president has been Mr. Welch of W. M. Welch Co., the No. 2 supplier of such equipment. With this background, this purpose and these leaders our surprise at this vicious, irresponsible SAMA attack vanished.

SAMA has been spectacularly successful as a lobbying organization. For the past 40 years it has been able to keep tariffs so outrageously high that substantially all educational apparatus of foreign manufacture has been barred from American classrooms. At this moment

the average American duty on educational apparatus is over 40 percent and goes as high as 60 percent.

These are staggering figures but they become literally unbelievable when they are contrasted against the fact that of all the countries of the free world, the United States is the only country that has anything but a token tariff on educational apparatus. Every other major country permits the import of such equipment absolutely free. Note that this free list includes such traditionally high tariff countries as Germany and France. Here in the United States this equipment is dutiable at over 40 percent, which places it in one of the highest general categories of all imported goods. You will recall that half of all imports into the United States are duty free and average tariff on all dutiable imports is about 11 percent to 12 percent. The credit to be heaped on SAMA for this virtuoso performance increases when it is considered that this tariff is the last major tax to which most of our educational institutions are subjected.

1922 TARIFF ON APPARATUS FOR EDUCATIONAL PURPOSES

As I have stated the United States historically had no duty on scientific apparatus imported for educational purposes until SAMA succeeded, as they boast, in imposing one in 1922. At the time of this tariff change all the deep, underlying issues were well thrashed out and it is illuminating to discover why this equipment was made dutiable. According to the present Chairman of the U.S. Tariff Commission the apparent reason for the new duty was, and I quote:

The allegation was made and substantiated by cited instances, that many institutions imports such apparatus and other material free from duty and then sold the apparatus to the students in competition with domestic sales outlets.

There were a few curious circumstances surrounding this legislation in that there is no evidence of public hearings being held, no evidence of any accused institution being called to testify and no evidence of any prosecution or attempted prosecution by the United States as a result of these alleged violations.

Certainly SAMA had created the perfect world for its educational apparatus manufacturers. For 37 years they have been completely protected from foreign competition. Their market has not only increased, it has exploded. The science age had dawned with a barrage of new techniques and theories. These, of course, require an endless flow of new instruments and apparatus into the hands of our teachers to demonstrate and teach the new theories of the ever-growing science classes.

CONDITION OF U.S. EQUIPMENT FOR TEACHING

It is interesting to measure the performance of the American educational apparatus manufacturers during this 37 years. It comes as a shock to learn that the United States is the only country in the world that we can discover that has had to form an official committee of its national physics teachers group to attempt to do something about what these teachers have termed the deplorable condition of the science teaching equipment available in the United States today.

The chairman of this committee of the American Association of Physics Teachers is Prof. Sanborn Brown, of the Massachusetts Institute of Technology. He recently stated that there has not been a

really new item of high school teaching equipment developed by the American educational apparatus manufacturers in the 20 years since before World War II. In fact, he points out, many of the items being offered by these manufacturers today date back in design to the 19th century.

EQUIPMENT SITUATION CRITICAL

The current official report of this committee states, and I quote:

We no longer need to document the fact that the crisis in science teaching is real. One of the reasons for this crisis is the lack of sufficient good commercial apparatus in the United States for use in student laboratories and lecture demonstrations, especially in physics. In the following pages, we show that the deficiency is due to a lack of interest and of effective competition on the part of the tariff-protected apparatus suppliers.

The report then continued, and I quote:

* * * on the whole there is widespread and increasing dissatisfaction among physics teachers with the high cost, relative poor quality, lack of imagination, and paucity of new developments in the current offerings of apparatus supply houses in this country. Some excellent and relatively inexpensive educational apparatus is again being produced abroad, but it is effectively being kept from educational users in this country by an import tariff averaging 40 percent. * * *

A report of the Office of Education of the Federal Security Agency states that in a survey of 715 schools by far the most troublesome single obstacle to good science teaching was found to be supplies and equipment.

The American Association of Physics Teachers has been pleading for 4 years for tariff relief so that they can buy the teaching tools that they feel they need. SAMA has doggedly and persistently opposed them without once making a constructive proposal for correcting the tragic conditions that have been so thoroughly documented. Meanwhile a situation continues that can only be described as pure idiocy.

SCIENCE EDUCATION KEY TO SURVIVAL

We all agree that we are engaged in a life or death science race with Russia and the key to this race is a science education. We have entered the atomic age and it has overnight become a vital, major segment of science education. I know that you will not believe it when I tell you that the only comprehensive catalog of equipment for teaching atomic physics is published in English by a German manufacturer and an American teacher must pay a 40 percent duty if he orders from it.

We are entering the space age and yet no American manufacturer offers a teacher the equipment he needs to help him tell his students how an airplane stays in the air. An English manufacturer offers 20 catalog pages of aeronautical educational equipment. Yet if an American high school teacher can get \$500 to spend on this equipment \$375 of it goes for the equipment and \$125 must be paid to the Government because of the tariff.

Equally absurd examples can be cited indefinitely but possibly the ultimate in absurdity is reached in laboratory porcelain ware. Every chemistry science class in every high school uses laboratory porcelain ware. It is an absolute monopoly in the United States produced by only one company, Coors Porcelain Co., in Golden, Colo. Yet the duty

on this porcelain is an unbelievable 60 percent and it is one of the very few items in the tariff schedule that has not been decreased one iota since the rate was established in 1930. The net result is that there is no competition at all and every time some science teacher dips down into his meager budget to buy \$100 of porcelain ware that he must have and cannot buy from other source, he pays \$65 for his goods and contributes \$35 to protecting Coors' monopoly, noncompetitive position.

I have dwelt at length on the tariff situation but I feel that only by understanding it and the effect that it has had on American science education can one make believable the deplorable condition of the American educational equipment industry today. It is against this total picture as I have outlined it to you that I decided to add Russian apparatus to the equipment that we are importing from England and Germany. It is against this total picture that I oppose the Bridges amendment.

DANGER IN AMENDMENT

My primary fear is that if this amendment is adopted it will become quickly confused, aided by SAMA, so that the teachers will soon forget the intent of the amendment and accept this as a ban on all foreign equipment. I say this with great confidence because we deal daily with the Buy American Act. The great harm that is done here is not the provisions of the act, that are not particularly burdensome, but the fact that purchasing agents and scientists in Government facilities across the Nation honestly believe that the act means that they can buy nothing but American equipment. I think that you can agree that it would be most unfortunate for American science if this misunderstanding came to exist even among a small segment of our teachers.

Beyond this overall consideration, the amendment, it seems to me, should be considered from two parts. First is it required to combat a Russian economic threat and second is it needed to meet a propaganda danger.

I think that the facts clearly indicate that this transaction has no part in the overall Soviet economic offensive other than the opportunity that it gives us to study their manufacturing and pricing techniques. There is no substantial sum of money likely to be involved here.

QUESTION OF DANGER TO YOUTH

The question of the danger to our impressionable youth of using Russian equipment does not disturb me. They were 4- to 8-year-old children during the information vacuum that set the stage for the shock of sputnik. These students are becoming aware of science now in the much healthier atmosphere of calmly accepting the fact that Russia has joined the family of first-class scientific nations. I don't think that these young people would or should consider it anything but natural that a Russian factory can turn out a first-class scientific instrument just as England, Germany, or Japan can.

If I did feel that there was some danger to these impressionable youths I would still consider this danger outweighed by what I believe is a far greater national danger. This danger is that by picking and choosing sources of our teaching tools on any basis other than the simple merit of the tools themselves we will continue to place

second-rate equipment in the hands of our teachers. This risk we cannot continue to run.

NEED FOR FREE WORLDWIDE INTERCHANGE

I hope that this amendment will not be adopted and that this committee will refuse to accept any further restrictions of any kind on the free worldwide interchange of equipment for the teaching of science. In fact, I consider it the responsibility of this committee to thoroughly investigate and then tear down the existing tariff barriers. Our educational institutions should have returned to them immediately the tariff exemption that is historically theirs and that was taken from them by SAMA on the ridiculous charge that they were selling pieces of the exempted equipment to students.

SAMA has labored long and hard to distort the importance of the educational market to the American instrument industry and has claimed that they will be ruined if they lose any fraction of this market. They have even gone so far as to deliberately plant on the former Secretary of Commerce a report dealing only with the wooden desk in the wooden school desk industry that SAMA has labeled "Scientific Equipment." SAMA then deliberately allowed the Secretary in all good faith to make a report to a congressional committee using these wooden desk figures as the picture of the scientific instrument industry.

The statistics indicated that in 1956 total imports of all scientific research and teaching equipment by all American educational institutions totaled \$1.5 million. If this figure is increased by a factor of 5 when these institutions are exempted from the tariff the total is still less than a fifth of 1 percent of the \$3.9 billion American instrument industry using the 1953 volume figures. The total would not even be a small percentage of the annual growth of this industry.

Yet by eliminating this barrier and refusing to erect further ones we will be guaranteeing that our American science teachers will not continue to be deprived of the right to choose from the best science teaching tools available in the world. It would seem a tiny price to pay for such comprehensive insurance.

The fact of overriding importance that must stand before all of us is that we place in our science classrooms the best teaching tools that the world has to offer. There is responsible evidence before you that this is not now being done. I ask you to ponder the significance of the statement that in the past 20 years of explosive scientific progress the American educational apparatus industry has not developed for our teachers one single truly new teaching tool. Can this committee feel that such obvious irresponsibility should be rewarded by the continued protection of a prohibitive tariff?

I suggest that this committee must not limit our teachers to the stale product of a stagnant industry but must permit them to buy freely wherever they feel that they can find the best. The stakes are too high. This equipment must be selected only on the basis of its teaching merit. In this area we cannot afford to continue the luxury of choosing the country of origin.

Senator HILL. We thank you very much, Mr. Grindle.

You have presented your side of the case in strong fashion, too.

I believe, Mr. Vannah, you wish to be heard on this subject, too, do you not?

Mr. William E. Vannah, editor of Control Engineering.

RUSSIAN TOUR

STATEMENT OF WILLIAM E. VANNAH, EDITOR OF CONTROL ENGINEERING

GENERAL STATEMENT

Mr. VANNAH. Mr. Chairman, I am an editor, a reporter; I am not a manufacturer.

With your permission, I would like to present some observations of U.S.S.R. scientific and industrial instrument production. These observations were made on a tour referred to in Mr. Stewart's statements, a tour of engineers and technical educators in August of 1958.

I was the organizer and leader of that tour. We toured Soviet institutes, laboratories, and production plants, concerned with scientific instruments and apparatus.

Because of the marked similarity between the production and marketing of industrial instruments and scientific apparatus for technical education, I believe that my observations, by analogy, may be applied to questions concerning the production and marketing of scientific apparatus for technical education concerned here today.

RUSSIAN SCIENTIFIC APPARATUS

The first point that we observed in our trip was that the scientific apparatus seen in the U.S.S.R. is well made, but is hardly superior to U.S. scientific apparatus. In fact, only the Soviet prototypes of new apparatus are technically competitive and they are 2 to 3 years away from volume production.

Figure 13 from a printed article presented to the committee shows one piece of scientific apparatus. This is a new miniature electronic recorder made in the Manometr plant in Moscow. It is not yet in volume production. Its design is based on a similar product made by the Leeds & Northrup Co. in Philadelphia, put on the market approximately 2 years ago, that is, the Leeds & Northrup Co. put it on the market. Models currently in production lag their U.S. counterparts technologically by 5 years or so because their basic designs, rather than being innovations, are copies from United States and German designs.

Figure 12 in this same article shows an electromechanical oscillograph based on German designs. It is a monopoly product of the Vibrator plant in Leningrad and is being produced at the high rate of 300 per year.

ARBITRARY MARKET PRICE

The second fact we observed is that the market price of these products is quite arbitrary. The price at the plant quoted by Soviet plant managers, and here of course our observations must be based on what these Soviet plant managers told us, they indicated that the price at the plant for mass produced instruments are not significantly lower than the price at the plant of comparable items produced in the

United States of America; rather, the prices are "in the same ball park." For example, the manager of the Manometr plant in Moscow told us that the current price of the electronic self-balancing recorder-indicator made at his plant on an assembly line was 2,360 rubles, and at the official rate of exchange rate of 4 to 1 that comes out to \$590.

Figure 16 of the article shows the assembly line manufacturing that instrument. He said that his plant makes a profit at this price. The price, I might add, is almost identical to the price quoted by the Brown Instrument Division, Minneapolis Honeywell Regulator Co. with headquarters in Philadelphia and its U.S. competitors for the same product.

REASONS FOR POSSIBLE PRICE DECLINE

The price of this Soviet product, the manager told us, has declined steadily by 3 percent per year, since 1949. If this product were to suddenly appear on the international market at, say, 50 percent below the price I have just quoted, it would have to be due to the Soviet government's taking an arbitrary loss, due to three factors:

(a) Present profitmaking price is in line with the price of the U.S. product, the price makes sense.

(b) Price decrease has been steady, not precipitate, for 10 years.

(c) Price-at-the-plant was guaranteed to the plant manager when his management staff, the management of his local economic region, and the Central Planning Committee negotiated his profitmaking production and economic plan for the year.

That price cannot be reduced during that year.

CHANGE IN INTERNAL SOVIET MARKET

Our third general observation was that the internal Soviet market is changing for instruments. Until recently, the Soviet market for instruments has been like a sponge. Now, however, internal markets for instruments such as the oscillograph shown in my figure 12 and the recorder-indicator shown in my figure 16 are temporarily saturating. Because of this, the oscillograph, made primarily for use in technical institutes, in fact the manager of the Vibrator plant making this instrument reported to us that at one time Moscow University was the biggest single customer, is being marketed in Czechoslovakia, Argentina, India, and China. This is according to his statement.

DEFICIENCY IN VARIETY AND SERVICE

The fourth general feature we observed is that the variety of instruments produced in the Soviet Union and the customer service attached to these instruments are quite deficient by our standards. U.S. manufacturers of instruments and scientific apparatus must offer broad product lines, for their customers are demanding, more and more often, systems that will do a complete job rather than single pieces of apparatus with limited purposes. These instrument systems require variety in product line, unless a manufacturer wants to buy instruments from another manufacturer and thus be in the resale business. The same is true of laboratory apparatus systems. Customers for these laboratory systems require variety, unbroken supply of the components that make up the system, application engineering, instructions in operation and maintenance, and a ready supply of

spare parts. These market characteristics in our country lead our instrument and apparatus industry away from mass production.

U.S.S.R. manufacturers, on the other hand, specialize in narrow product lines and take little responsibility for their products once they have left their plants. Their product variety is limited by standardized designs, frozen by central ministry selection. Thus the factors of broad customer service, key competitive features of our instrument and apparatus industry, are left out of the U.S.S.R. instrument and apparatus manufacturer's economy. He is a producer solely.

TECHNICAL EDUCATION HIGHLY SPECIALIZED IN U.S.S.R.

Our fifth general observation is that the technical education available in the U.S.S.R. is highly specialized. Curriculums, texts, training aids, and apparatus in the U.S.S.R. universities and technical institutes, we observed, emphasize narrow specialties rather than full understanding and development of the basic principals of science on a broad basis, which is the trend of our technical education today. In the laboratories and lecture halls of the physics department of Moscow University, we saw training aids that were for the demonstration of highly specific applications of basic phenomena. There were, for instance, enlarged models of electronic modulator circuits and a thermoelectric generator for operating radios in remote areas not supplied with electric power. To educate our future generations in basic principles on a broad basis, our instructors, on the other hand, seek variety of apparatus and flexible systems of apparatus, rather than highly specialized, one-purpose apparatus.

Technical texts published in the U.S.S.R. are specialized and lack broad variety, too. At a meeting with Soviet technical educators and technical book publishers recently at my office, I learned that the selection of book manuscripts in the U.S.S.R. is conducted by central committee in such a way that it militates against variety and against free selection by instructors from a variety of texts. This approach makes volume production of texts profitable. Our approach, on the other hand, while perhaps not so profitable per book, is to let authors' peers select from a wide variety of manuscripts which texts will be used in classroom instruction. Our method is expensive, but it encourages variety and it, like the production of scientific instruments and apparatus, is tuned to customer demand and service.

Thank you.

Senator HILL. On this trip did you visit any other country and study this equipment?

Mr. VANNAH. Our objective actually was U.S.S.R. as a group. Separately, after we disbanded in Moscow we went our various ways not as a group. Some of our men went to Germany and Austria. I went to Sweden and Finland and Norway, myself. There is very little instrument industry to observe in Norway and Sweden. I would say that the instruments and apparatus made there are comparable to Germany's designs and would be priced at above what we would expect to pay if we imported these instruments from Germany.

Senator HILL. Thank you very much, sir.

Mr. VANNAH. Yes, sir.

STATEMENT OF SENATOR KEATING

Senator HILL. I have a letter here from Senator Keating of New York. It was his intention to appear here today to testify on this matter of the purchase of Soviet scientific equipment from funds from the Defense Education Act. Unfortunately, he had to be in Schenectady today to attend a funeral with the New York State Assembly. Therefore he was unable to be here. He advises me he will submit his statement for incorporation in the record of the hearing.

STATEMENT OF HON. KENNETH B. KEATING, A U.S. SENATOR FROM THE STATE OF NEW YORK

Mr. Chairman and members of the committee, I appreciate very much this opportunity to express my most emphatic views concerning the use of funds appropriated under the National Defense Education Act to purchase Russian scientific equipment. Let me make my position unmistakably clear—I oppose the use of taxpayers' funds to aid and abet the machinations of the Soviet economic cold war, and I therefore strongly urge the adoption of an amendment to the measure before the committee to bar the use of Federal funds for the purchase of Soviet equipment for our secondary schools.

In this connection, I urge the committee to give its closest consideration to the statement made before this group by Mr. Eugene L. Stewart, in behalf of the Scientific Apparatus Makers Association. Mr. Stewart has obviously conducted a careful and detailed study of this situation, and I believe he has made a most able presentation of his case. I subscribe wholeheartedly to the position he has enunciated.

I also want to pay tribute to the distinguished ranking minority member of this committee, Senator Styles Bridges, for his leadership which has sparked the movement for this amendment.

I want to emphasize as strongly as I can that this amendment must be considered in the cold, clear light of the life-and-death struggle in which we are now engaged with the Soviet Union. We have before us not a question of free versus restrictive trade, or of unnecessary tampering with free and open competition. We have before us a question which goes to the very root of the cold war economic offensive now being manipulated by the men in the Kremlin.

The possibility that the Soviet Union might flood the American market with low-priced, high-quality scientific equipment troubles me greatly, not only because they are priced so low as to obviously constitute a political and propaganda pawn for the Russians, but because they also represent a direct and insidious threat to our domestic industry.

At the same time, I believe serious consideration must be given to the source from which these funds are to be expended—namely, our taxpayers, via the National Defense Education Act. Clearly, it would be contrary to the spirit of that act to use funds appropriated for its implementation to make Soviet propaganda fodder. Clearly, it would be contrary to the best interests of the United States and the free world to use Federal funds to present the Communists with a substantial political coup.

Yet, that is exactly what would happen if Congress allows the funds appropriated for the Defense Education Act to be used to purchase Soviet scientific apparatus.

Mr. Chairman, at this point I want to make it unmistakably plain that the amendment I support would not be aimed at imports from all nations of the world. The amendment I support would specify that funds could not be used for goods originating only in Communist or Communist-dominated countries.

I do not think we should place a blanket over all imports of scientific goods from all countries. Many countries which now export such equipment to this country are engaged in free and open competition. They seek only clean, above-board markets. They are not seeking propaganda advantages or political gain.

Such is not the case with the Soviet Union in this field. It is clear from the evidence and testimony which has been presented that the Russians have deliberately cut the prices on their scientific equipment in order to utilize it as a

cold war weapon. The evidence shows that Russian costs of production are similar to those in the United States. Yet, they are selling their goods for one-fifth our price.

The explanation lies, of course, in the fact that the Soviet Government can control all aspects of their productive machine and can manipulate the prices of goods they export for their own purposes.

The testimony of Paul D. Grindle, the president of the Ealing Corp., the first U.S. commercial house to enter into arrangements with the Soviet state trading organization for the sale of scientific apparatus on the U.S. market, shows in addition that the Soviet prices are well below their cost of production. It is only by eliminating from their accounting, according to Mr. Grindle's testimony, such factors as interest charges on the capital investment in plants, depreciation charges, and other fixed expenses which American manufacturers must bear that a statement can be attempted that the Soviet equipment is not being sold below cost. Further, this importer's testimony tacitly admits that this trade "will be profitable" to the Russians—not because the money received from Federal grant-in-aid funds for its purchase will bring the Soviets a return which exceeds the actual outlay in its manufacture—but rather because it will put into the Soviet hands dollar exchange which will enable them to purchase plants and equipment which they badly need to sustain them in their great leap forward in competition with the United States. It is a curious bit of reasoning which would class as "profitable" in an American context a transaction which results in products being sold at prices actually below the cost of production, and which contributes directly to the anti-American activities of the Soviet Union.

Not only does this importer himself corroborate the extensive information which has been submitted by the domestic industry to the effect that this Russian program of offering science teaching apparatus to the U.S. educational market is based upon prices below the cost of production; he also concedes that the sales in this country of Russian equipment will have propaganda value to the Russians. And of course they will.

Mr. Chairman, I find it impossible, as an American and in the light of my responsibilities as a U.S. Senator, to remain passive in the face of this type of economic and propaganda offensive. Some of the major plants for the production of scientific apparatus for teaching purposes are located in New York State. In the laboratory apparatus field, our State enjoys the presence of the following companies manufacturing the type of products indicated:

- American Star Cork Co., Inc., 175 North Ninth Street, Brooklyn, N.Y.: Corks for laboratory use, and screw caps.
- J. & H. Berge, 145 Hudson Street, New York, N.Y.: Laboratory apparatus and reagents; assay supplies; crucibles and clay goods; balances and weights.
- R. P. Cargille Laboratories, Inc. (affiliated with Cargille Scientific, Inc.), 117 Liberty Street, New York, N.Y.: R.P.C. viscosity tubes (for the air-bubble method); Cargille's immersion oil for microscopy; Cargille's certified index of refraction liquids; R.P.C. sample storage cases; urinalysis apparatus and reagents; reagents for chemical microscopy; various reagents and test kits, Allen reference sets and other specialties for microscopy, custom tablet making.
- Clay-Adams, Inc., 141 East 25th Street, New York, N.Y.: Adams centrifuges, hemometers, hemacytometers, Yankee pipettes, blood sedimentation outfits, rotators, shakers, serodiagnostic equipment, Gold Seal microslides and cover glasses, slide boxes and files, supplies for microscopy, magnifiers, dissecting instruments and kits, surgical supplies and specialties, Medichromes (2 inches by 2 inches Kodachrome lantern slides), slide projectors and viewers, and screens; anatomical models, charts, skeletons, skulls.
- Corning Glass Works, Corning, N.Y.: Pyrex, Vycor, and Corning brands of laboratory glassware, microscope cover glass, pharmaceutical glassware, thermometer tubing; color filters, ophthalmic blanks, radiation shielding glasses, sun glass blanks; Pyrex brand armored and Double-Tough pipe, shell and tube heat exchangers, gage glasses; lighting ware; railroad and marine glassware; appliance parts; incandescent bulbs, television tube blanks, both colored and black and white; Neon sign tubing; glass electronic components, delay lines; Pyrex brand dinner and ovenware.
- Ever Ready Thermometer Co., 116 Wooster Street, New York, N.Y.: Laboratory etched stem thermometers.
- The Emil Greiner Co., 20-26 North Moore Street, New York, N.Y.: Manufacturers of thermometers, hydrometers, blown glassware, petroleum and

bituminous materials test apparatus, constant temperature baths, thermoregulators, motor stirrers, laboratory electrical appliances. Merchandisers of laboratory apparatus, supplies, chemicals.

Hellige, Inc., 877 Stewart Avenue, Garden City, N.Y.: Scientific instruments, general laboratory glassware, reagents and specialties for medicine, industry, and public health; colorimeters for visual and photoelectric colorimetry; colorimetric comparators for pH measurements, water and chemical analysis, color of varnish, petroleum oils, etc.; water testing outfits, turbidimeter, conductivity meter, stalagmometer, soil testers, bacteria counting apparatus, hemometers, hemacytometers, clinical testing outfits, blood sedimentation apparatus, pulsimeter, blood viscometer, hemacytometer counting chambers, and cover glasses, blood diluting pipettes, microcover glasses and slides, eyepiece micrometers, polariscope cover glasses, optical goods, blown and engraved glassware.

Krebs Electric & Manufacturing Co., Inc., 237-239 Lafayette Street, New York, N.Y.: Petroleum testing apparatus, viscosimeters, constant temperature baths, emulsifiers, asphalt testers, ductilometers, penetrometers, ASTM apparatus, laboratory stirring apparatus.

Macbeth Corp., Little Britain Road, Newburgh, N.Y.: Scientific instruments, including pH meters, densitometers and colorimeters, also laboratory and color matching equipment.

Lourdes Instrument Corp., 53d Street and First Avenue, Brooklyn, N.Y.

Manostat Corp., 20-26 North Moore Street, New York, N.Y.: Manostats, teflon needle valves, microburets, micropipets, manometers, standard taper clamps, flowmeters, molecular filters, McLeod gages, universal clamps.

Miller & Weber, Inc., 71-14 Myrtle Avenue, Glendale, Long Island, N.Y.: Laboratory thermometers.

Modern Laboratory Equipment Co., Inc., 1811 First Avenue, New York, N.Y.: Constant temperature laboratory and production equipment, ovens: gravity, mechanical convection, hazardous atmosphere, industrial, supertemp, plastic; incubators: walk-in, reach-in and cabinet type; bod cabinets, constant temperature baths, hot air sterilizers, humidity cabinets electro burners, low-temperature kinematic viscosity and air well baths, oil testing equipment, heat controls.

New York Scientific Supply Co., Inc., 28 West 30th Street, New York, N.Y.: Merchandiser of chemicals and chemical biological laboratory apparatus. Manufacturer of biological material (models, lantern and microscope slides, museum preparations, skeletons, etc.).

New York Laboratory Supply Co., Inc., 76 Varick Street, New York, N.Y.: Laboratory glassware and glassware specialties, porcelainware, filter paper, petroleum testing apparatus, temperature control apparatus, thermometers, hydrometers, furnaces, ovens, centrifuges, balances, water stills, colorimeters, microscopes, laboratory hardware and chemicals.

The Nalge Co., Inc., 625 South Goodman Street, Rochester, N.Y.

Nurnberg Thermometer Co., Inc., 124 Livingston Street, Brooklyn, N.Y.: Thermometers, hydrometers, industrial thermometers, dial thermometers, gages, recorders, laboratory apparatus, laboratory glassware.

Palo Laboratory Supplies, Inc., 81 Reade Street, New York, N.Y.: Laboratory apparatus, supplies, and chemicals; water and feedwater testing equipment, laboratory stirrers and mixers.

Pfaltz & Bauer, Inc., 350 Fifth Avenue, New York, N.Y.: Photoelectric apparatus, spectrophotometers, reflectometers, colorimeters, fluorophotometers for vitamin determinations, galvanometers, pH meters, analytical balances, micro balances, microscopes, microtomes, Fixanal preparations for standard normal solutions, reagent chemicals, biological stains, rare earth, salts, etc.

Standard Scientific Supply Corp., 808 Broadway, New York, N.Y.: Merchandiser of general laboratory supplies, apparatus, chemicals, and reagents. Trade name specialties manufactured; Standard warming tables, pipettes, incubators, stable-form reagents, and chemicals.

Voland & Sons, Inc., Post Office Box 680, 27 Center Avenue, New Rochelle, N.Y.: Analytical balances and weights.

Will Corp., 39 Russell Street, Rochester, N.Y.: Laboratory equipment, glassware and reagents for chemistry, biology, bacteriology, biochemistry, pathology, and metallurgy.

In the optical field we have in New York State manufacturing facilities important not only to the economic health of our State and the Nation, but also

indispensable to the national security of the United States. These are as follows:

American Optical Co., Instrument Division, Buffalo, N.Y.: Microscopes, microtomes, microscope and laboratory illuminators, photomicrographic cameras; hemacytometers, Delineascopes (projection apparatus) for lantern slides, opaque, color-plate projectors; microfilm and micro-opaque readers, colony counters; spectrometers; refractometers, and other optical measuring instruments, optical specialties, special purpose lenses and optical systems, allied instruments and accessories. Trade names: Spencer scientific instruments, Delineascopes, Bright-Line hemacytometers, Quebec colony counters, Microstar microscopes, Cycloptic microscopes, Cyclospot illuminators, Starlite illuminators, Magnavisa projection magnifier, Ortho-Illuminator, Orthophot.

Bausch & Lomb Optical Co., 635 St. Paul Street, Rochester, N.Y.: Microscopes, micro projectors; microtomes; photoelectric colorimeters; refractometers, saccharimeters; spectroscopes; spectrographs; spectrophotometers; diffraction gratings; echelles; photomicrographic equipment; metallographic equipment; instruments for industrial inspection, quality control, and measuring; photographic lenses for still and motion picture cameras; projection lenses; CinemaScope camera and projection lenses; Balopticon projectors; photogrammetric equipment; ophthalmic and diagnostic instruments; spectacle lenses, frames, and cases; optical glass, optical parts; binoculars; telescopes; rifle sights; and sunglasses.

W. & L. E. Gurley, 514 Fulton Street, Troy N.Y.: Instruments for engineering and surveying; hydraulic engineering; paper and textile testing; meteorology; standard weights and measures; precision scales and reticles.

Klett Manufacturing Co., 179 East 87th Street, New York, N.Y.; Bio colorimeters, Klett-Summerson photoelectric colorimeters, nephelometers, fluorimeters, electrophoresis Tiselius, Thermaphores, glass standards, glass cells, haemometers, Klett reagents, makers of special and custom-made scientific instruments, accessories in connection with above.

E. Leitz, Inc., 468 Fourth Avenue, New York, N.Y.: Microscopes and microscopical accessories; Leica cameras and accessories; photomicrographic, petrographic and metallographic equipment; field glasses; photoelectric colorimeter; carbon meter. Trade names: Leitz, Leica, Elei.

Carl Zeiss, Inc., 485 Fifth Avenue, New York, N.Y.: Optical instruments and photographic cameras.

I do not intend to stand by and see these fine firms in my State—or in any other State—deluged by a niagara of Soviet equipment expressly priced to hurt the domestic industry and contribute to a major propaganda coup for the Kremlin. I certainly do not object to subjecting American firms to free and open competition from foreign firms, but that is not the case here. We are dealing with products which are purposely designed to undercut the American market and to be used as a political tool.

Mr. Chairman, I believe very deeply that we would be derelict in our duty if we permitted the use of public funds to aid the cold war designs of the Russians. If we allow Federal funds to support this Soviet economic offensive, it will have two main effects:

First, the sale in the U.S. market of Soviet scientific apparatus for our secondary schools at prices averaging one-fifth the prices of U.S.-produced apparatus would unquestionably and inevitably undermine the domestic producers of such equipment. It is impossible for any industry in the United States—whether it be scientific apparatus, electronics, optical instruments, watches, electrical machinery, or machine tools—to compete effectively against this type of destructive price warfare by the Soviets.

Second, this Russian propaganda offensive could not avoid creating adverse impressions, in both the short and long run, on the minds of young Americans who would use this type of scientific apparatus in their schoolwork.

The U.S. importer of the Russian equipment, I note from his prepared statement, concedes that there will be propaganda benefits to Russia from his sale of Soviet equipment to American public schools. In these critical times, where Americans to a man understand the deadly seriousness of the contest between the United States and Soviet Russia, I fail to understand how any American can participate in a program which he himself realizes will confer propaganda advantages upon the Soviet Union.

I should like to call your attention in this regard to an excerpt from a paper entitled "Psychopolitical Implications of the Possible Importation of Soviet-Produced Science-Teaching Equipment for Use in Our Secondary Schools," pre-

pared by Mr. Duane Thorin, a psychological warfare expert employed by the Navy Department to study and evaluate the significance and impact of the Soviet propaganda methods. He states:

"There should be no question of whether or not the widespread use of Soviet-made equipment in our secondary schools would have adverse influence on the students. The reality of this danger can be established from a standpoint either of psychology as such, or that of educational practice and experience. The contention that student minds are not sufficiently impressionable for any adverse effects to result is contradictory on its face. If the minds were not impressionable, they would also be not educable. This is not at all a matter, as someone has suggested, of stirring young students to 'unpatriotic zeal.' Psychological warfare is a subtle and progressive process, the first steps of which can be described as 'lulling to patriotic apathy and indifference.' Any influences which tend to undermine confidence or belief in our own economic or governmental system—to any extent, however small—is a gain for the Communists in this progressive process."

It seems to me that we are faced here with a rather simple choice. We have been asked to appropriate \$60 million to the Department of Health, Education, and Welfare for use in the grant-in-aid program which will enable our secondary schools to purchase badly needed equipment for teaching mathematics, science, and modern languages. Now the avowed purpose of the National Defense Education Act is to strengthen the United States through an expansion of our educational resources and to fortify the Nation in its struggle with the Soviet Union for technological supremacy. In the light of these facts, it is inconceivable to me that we can seriously consider authorizing Federal funds, supplied by our taxpayers, to be sent to Soviet Russia. For we know that there they will strengthen the Communists in their program of building their industrial potential to levels which match or exceed those of the United States, and thereby intensify their capabilities to threaten the peace of the world.

I note with regret the manner in which some otherwise thoughtful persons have rushed to the support of this program for pushing Soviet equipment into our midst. I regret even more that the proponents of this Soviet economic-propaganda program have resorted to what seems to me plainly to be the "big lie" technique in attacking the American scientific apparatus industry. Mr. Grindle's prepared statement before this committee is an extreme example of this. He states that the Federal grant-in-aid funds are about to be spent for "outdated, obsolete, antiquated junk." He adds that "the American educational apparatus industry has not developed for our teachers one single truly new teaching tool" in the past 20 years. Both of these statements are patent distortions of the truth, if not outright lies. The catalogs of the manufacturers and distributors of laboratory apparatus and optical equipment are quite voluminous and freely available to anyone who cares to inquire into them.

I understand that a large display of these catalogs was assembled in the committee room in conjunction with the testimony on May 25. These catalogs and other literature of the domestic industry list dozens, if not hundreds, of items of new teaching equipment which have been introduced in recent years. Indeed, the domestic industry assembled, in an anteroom adjacent to the hearing room on May 25, an extensive display of science teaching apparatus produced in the United States and offered in the secondary school market. Most of the items in that display were very new, having been brought forth on the market in the past few years. I understand that you viewed this exhibit and are aware that the statement made by the importer that not one single item of new equipment has been brought forward by the domestic industry in the past 20 years is false. I note also in this regard that the witness representing the domestic industry appended to his statement presented at the hearing a list of over 100 items of science teaching apparatus which have been brought forth on the American market as new products since World War II.

It is an old trick, when facts are not available to meet an issue on its merits, to raise side issues which will distract the attention of those pondering the matter. Exponents of the importation and sale of Russian science teaching apparatus find it impossible to deny the essential facts of the sale of Russian goods below the Russian costs and the adverse propaganda impact of such sales. Instead, they raise contentions concerning the tariff-protected status of the domestic industry. Curiously, they berate the U.S. import duties which are imposed at the full tariff rate by direction of the Congress pursuant to the Trade Agreements Extension Act of 1951. They cite the example of other nations

who, it is said, permit the importation of science teaching apparatus free of customs duties. It is suggested that if the U.S. industry were not the beneficiary of tariff protection, it would somehow be more progressive and have equipment of the type which is offered by other foreign countries. Yet, at the same time—and frequently in the same breath—these critics acknowledge, as Mr. Grindle does, that “in the rest of the world this equipment is manufactured by an essentially hand industry.” It, therefore, cannot rationally be argued that the presence of tariff protection for the domestic industry accounts for the fact that science teaching apparatus is not mass-produced in the United States. For if the tariff were the cause of the hand-crafted industry, one would expect to find in other countries where there is no tariff that the industry producing scientific apparatus would be on a mass-production basis. But by their own words this is not so.

Furthermore, the persons who are quick to criticize the domestic industry point to the case of Canada where there is no import duty on scientific apparatus for teaching. These people themselves point out that “in the absence of any substantial domestic instrument production, Canadian educators and scientists buy apparatus freely from anywhere in the world without import duty; but the main bulk, namely 93.5 percent of the educational apparatus imported to Canada is still bought duty free from U.S. companies.” If the educational apparatus produced in Germany, England, Switzerland, and elsewhere overseas were, in fact, superior to that of the United States, or a suitable variety of U.S. equipment were not available, we would hardly expect to find such an overwhelming proportion of the imports of educational apparatus into Canada being supplied by the United States. These figures disprove the contentions of those who for their own purposes want to see Russian equipment pushed into the U.S. market and who piously base their advocacy upon belittling of the products of the U.S. industry.

I find myself in complete agreement with Mr. Thorin's thesis in the study cited above when he concludes: “Prompt action should be taken to preclude the purchase of Soviet-made teaching apparatus with Federal funds, especially if such equipment is destined for use in secondary schools. Failure to take such action will have at least a twofold effect detrimental to the national interests:

“(a) The undercutting of private American industrial enterprises by unethical foreign competition; in this instance by an industry under absolute control of an international conspiracy dedicated to the destruction of all private property and private enterprise.

“(b) A certain, if somewhat indefinite, degree of adverse influence especially on young students minds, lessening their confidence in the American system of free enterprise and, in turn, the economic and governmental principles of the Nation.

“Both of the potential consequences listed above are recognizable as specific intermediate goals of the Soviet Union in its continuing quest for world domination. Furthermore, in addition to any psycho-political benefits which accrue to them by subtle process (consequence (b) above), the Communists will be able to exploit such an occurrence for worldwide propaganda favorable to themselves. (Excessive delay in this matter can also abet this propaganda advantage, should the importing firm manage even a small scale trade in the interim, or create undue and uninformed public interest in the matter.)”

Mr. Chairman, for these reasons and because I think we must fight fire with fire, I support vigorously an amendment to H.R. 6769 which would prevent the use of National Defense Education Act funds for the purchase of Soviet scientific apparatus for our secondary schools. Let us, by adoption of this amendment, show the Russians that we intend to fight them tooth and nail in their cold-war economic offensive. Otherwise, we abdicate our responsibilities to our constituents, our Nation, and our friends of the free world.

COMMUNICATIONS

Senator HILL. The views of the Departments of Health, Education, and Welfare, State, and Commerce with respect to the proposed amendment have been outlined in letters to the committee. These letters will be included at this point in the record.

(The letters referred to follow:)

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, May 22, 1959.

Hon. LISTER HILL,
U.S. Senate,
Washington 25, D.C.

DEAR SENATOR HILL: I have your letter of May 4, 1959, with which you enclosed a portion of the Congressional Record for April 28, 1959, covering a discussion of a proposed amendment to the second supplemental appropriation bill, 1959 (H.R. 5916), which would limit the appropriation in the bill, under the heading "Office of Education, Defense Educational Activities," for grants to States and loans to nonprofit private schools for science, mathematics, and modern foreign language teaching facilities. The proposed amendment would preclude the use of this appropriation for the purchase of science, mathematics, and modern foreign teaching facilities which are sold, manufactured, or otherwise identified as originating in Communist or Communist-dominated countries.

The discussion in the Congressional Record indicates a concern on the part of certain Senators that the importation of materials, and purchase of these by our schools, would raise problems of economic peril to American manufacturers and could have adverse propaganda effects on American students. Apparently this concern stems from public announcements concerning one importer who is reported to have ordered from Soviet Russia some \$1 million worth of 24 different scientific equipment items.

We do not believe that the proposed amendment to this Federal appropriation under title III of the National Defense Education Act would provide a proper or effective solution to either of the assumed consequences mentioned above. If foreign policy or economic considerations should indicate the desirability of any such restrictions as those which would be imposed by this amendment—and we understand that the Department of State and Commerce are advising you separately to the effect that they do not—such restrictions should be imposed generally and not limited to purchases made with funds appropriated for educational purposes under the National Defense Education Act.

The purpose of the National Defense Education Act is to promote the national defense and security through strengthening certain key aspects of education in this country. This purpose is subserved in part through title III of the act which authorizes grants to States and loans to nonprofit private schools to help them acquire the equipment and materials they need to expand and improve their instruction in the sciences, mathematics, and modern foreign languages. The proposed amendment would impose upon the local school districts and nonprofit schools purchasing such materials and equipment with the aid of Federal funds, restrictions which are in no way promotive of the accomplishment of the underlying purpose of the National Defense Education Act and which do not apply generally to such purchases when made by other users of such equipment and materials. Such a restriction would, we believe, obviously discriminate against local public school districts and private nonprofit schools which participate in the Federal program authorized under title III of the act. Participating school systems and schools should be free to purchase materials and equipment available in the open market on the same terms and conditions as they may be purchased by others.

The proposed amendment would constitute an unwarranted exercise of Federal control over education and educational processes in this country. We, in the Department, are dedicated to the proposition that Federal assistance for educational purposes should be afforded with only such minimum Federal requirements as are needed to assure that the Federal objective in affording the assistance will be reasonably subserved. It is, we think, patently unsound to use programs of Federal assistance to States, local public agencies, nonprofit institutions, and others as a vehicle for the accomplishment of objectives unrelated to the basic purposes of the programs of Federal assistance.

The Commissioner of Education and I would urge your committee to exclude any such proposed limitation from appropriation bills for this Department. We wish to reassure you of our concern for retaining the integrity and spirit of the National Defense Education Act and its provisions for State and local control of education.

I trust that his response to your inquiry will be satisfactory. Please let us know if we can be of further service.

Sincerely yours,

ARTHUR S. FLEMMING, *Secretary*.

DEPARTMENT OF STATE,
Washington, May 29, 1959.

HON. LISTER HILL,
*Chairman, Subcommittee on Labor,
Committee on Labor and Public Welfare,
U.S. Senate.*

DEAR SENATOR HILL: I refer to your letter of May 4, 1959, requesting the Department's comments on an amendment which has been proposed to the appropriation bill covering the defense educational activities of the Department of Health, Education, and Welfare for the fiscal year 1960. The amendment would provide that "no part of this appropriation shall be available for the purchase of science, mathematics, and modern language teaching facilities, which are sold, manufactured, or otherwise identified as originating in Communist or Communist-dominated countries." More particularly, the proposed amendment would prohibit the use of Federal funds made available as grants to State educational agencies and as loans to private schools under the National Defense Education Act of 1958 for the purchase of the specified items. It is the Department's understanding that the proposed amendment is principally aimed at preventing the purchase of science training equipment from the Soviet Union.

Although the proposed amendment would not conflict with any legal obligations of the United States toward the countries affected thereby, the Department is of the opinion that the amendment is not desirable. Enactment of the amendment would not be compatible with U.S. policy, which favors the expansion of peaceful trade with the Soviet Union and the countries of Eastern Europe within the limitations set by existing laws and regulations. Moreover, as a matter of policy, this Government seeks to strengthen trade and economic ties with certain countries of Eastern Europe.

While there have been a number of press reports about imports of Soviet scientific and technical equipment for teaching purposes, official U.S. trade statistics show that actual imports of scientific and professional equipment, apparatus, and supplies from the Soviet Union for the year 1958 and through March 31, 1959, amounted to only \$517. The Department realizes that if there were large-scale importation and wide distribution of Soviet laboratory equipment in the United States there might well be some propaganda impact. However, at present we do not know whether significant quantities of such imports can be expected.

We note from the discussion of this proposed amendment on the floor of the Senate as reported in the Congressional Record of April 27 that there was concern about possible injury to American industry from further imports of science training equipment from the Soviet Union. We invite your attention to the safeguards for American industry provided through other laws which, it is believed, would take care of any real difficulties which may be created for our domestic industry by acquisition of equipment from abroad to meet the purposes of the National Defense Education Act of 1958. The national security amendment to the Trade Agreements Extension Act of 1958 (sec. 8) authorizes the imposition of restrictions on imports if they threaten the national security. The Antidumping Act of 1921, as amended, authorizes the Government to levy additional duties on imports where the injury or threat of injury has been caused by imports sold at dumping prices. Section 303 of the Tariff Act of 1930 provides for the imposition of countervailing duties on imports on which a subsidy or bounty has been bestowed. Section 307 of the Tariff Act denies entry to goods produced by forced labor.

The Department, along with other interested agencies, is closely following developments concerning the Soviet trade and propaganda challenge in the free world. You may be sure we will be prepared to recommend appropriate action as the situation may warrant.

The Department of course recognizes the fact that the proposal is limited to placing conditions on the use of Federal funds in matters of procurement by State educational agencies and private schools seeking Federal assistance, and that it has no bearing on the activities of private trade in the United States

with enterprises in the countries concerned. However, congressional policy in the form of limitations on the activities of governmental agencies, whether Federal, State, or local, or on private parties using Federal funds, is bound to have effects on the private sector of the trade and to that extent the U.S. policy objectives referred to above are likely to be impaired.

The Department accordingly would oppose enactment of the amendment proposed to be attached to the bill covering the defense educational activities of the Department of Health, Education, and Welfare.

The Department has been informed by the Bureau of the Budget that there is no objection to the submission of this report.

Sincerely yours,

WILLIAM B. MACOMBER, Jr.,
Assistant Secretary
 (For the Acting Secretary of State).

THE SECRETARY OF COMMERCE,
Washington, May 28, 1959.

HON. LISTER HILL,
Chairman, Subcommittee on Labor-HEW,
U.S. Senate, Washington, D.C.

DEAR SENATOR HILL: This is in reply to your letter of May 4, 1959, relative to this Department's views on a proposed amendment to the 1960 appropriation of the Department of Health, Education, and Welfare, prohibiting the use of HEW funds for the purchase of scientific and educational equipment in Communist or Communist-dominated countries. The funds in question would be allocated to the States under grants-in-aid to be matched by State funds to be used in procurement for schools. On May 8 we indicated that we had the matter under study and would communicate our comments as soon as possible.

The Department of Commerce does not recommend enactment of an amendment of the character proposed by Senator Bridges, when H.R. 5916 was debated in the Senate. The Department's views are based primarily on considerations of general trade policy.

The President, in replying to Premier Khrushchev's letter of June 2, 1958, proposing an expansion of United States-U.S.S.R. trade, on July 14, 1958, stated that "Expanded trade between our countries could, under certain conditions, be of mutual benefit and serve to improve our relations in general." The President elaborated this view in this same letter, as follows:

"As you know, U.S. export and import trade is carried on by individual firms and not under governmental auspices. There is no need, therefore, to formalize relations between U.S. firms and Soviet trade organizations. Soviet trade organizations are free right now, without any need for special action by the U.S. Government, to develop a larger volume of trade with firms in this country. They may not be taking advantage of all available possibilities. In recent years, U.S. firms have bought far more from Soviet trade organizations than the latter have purchased from the United States. Furthermore, many of the more important Soviet trade items mentioned in your letter are accorded duty-free entry into the United States.

"Thus, the situation favors the expansion of Soviet purchases in this country. While the extension of long-term credits for Soviet purchases in the United States would raise complex legal and political questions, the normal commercial credit terms presently available to Soviet trade organizations permit the further expansion of trade between our two countries."

It would be contrary to the letter, as well as the spirit of the President's reply, for the U.S. Government to make it impossible for the U.S.S.R. to market goods in this country. It is within the spirit of our tradition to permit our local communities and businessmen to exercise their judgment as to the purchases which they make. We are confident that our people can be depended upon to understand and act in the best interests of their Government, their industry and their schools.

In any event, should these countries resort to dumping or other unfair trade practices, there are various U.S. laws already available which can be invoked to protect our industry.

Finally, even if enacted, the proposal under consideration could not reach purchases made by State and local authorities without Federal funds. Here

we would necessarily have to depend upon the good judgment of our local authorities.

We have been advised by the Bureau of the Budget that there is no objection to the submission of this report.

Sincerely yours,

FREDERICK H. MUELLER,
Under Secretary of Commerce.

COMMITTEE RECESS

Senator HILL. Is there any other witness who wishes to be heard?

If not, we will stand in recess and we will take a look at the equipment that Mr. Stewart and his associates have here for us.

The committee will stand in recess.

(Whereupon, at 4:12 p.m. Monday, May 25, 1959, the committee adjourned to reconvene at 10 a.m. Tuesday, May 26, 1959.)

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR 1960

TUESDAY, MAY 26, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to call, in room 1318, New Senate Office Building, Hon. Lister Hill, chairman of the subcommittee, presiding.

Present: Senators Hill, Pastore, and Smith.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

STATEMENTS OF MIKE GORMAN, EXECUTIVE DIRECTOR, NATIONAL COMMITTEE AGAINST MENTAL ILLNESS, WASHINGTON, D.C., AND DR. NATHAN S. KLINE, DIRECTOR OF RESEARCH, ROCKLAND STATE HOSPITAL, NEW YORK, AND ASSISTANT CLINICAL PROFESSOR OF PSYCHIATRY, COLUMBIA UNIVERSITY, NEW YORK

GENERAL STATEMENT

Senator HILL. The committee will kindly come to order.

Mr. Mike Gorman, executive director of the National Committee Against Mental Illness, will be our first witness.

Do you want Dr. Kline to come up with you?

Mr. GORMAN. If that pleases the chairman.

Senator HILL. Dr. Nathan S. Kline, director of research, Rockland State Hospital, New York.

Gentlemen, we are always glad to have you here. We welcome you and will be glad to have you proceed in your own way.

Mr. GORMAN. Mr. Chairman and members of the committee, on April 21 the New York Times ran a headline, "Flemming Pleads for Mentally Ill," over a story covering a press conference held the previous day by Secretary of Health, Education, and Welfare, Arthur S. Flemming.

Tens of thousands of mentally ill patients in our Nation today are receiving disgracefully inadequate care and treatment, Mr. Flemming stated at his press conference. While there has been some encouraging progress against mental illness in recent years, the situation as a whole is one that I believe the American people would find genuinely shocking if they knew the facts.

Mr. Flemming continued with a biting criticism of our present financial support of efforts to fight mental illness. Here are the Secretary's own words in all their eloquent simplicity:

One thing, however, is clear: the resources we are devoting to mental illness today fall dreadfully short of meeting the problem. We have not yet mounted an effective attack on mental illness in this country. The fact is, we are barely holding the line. * * * Many of the 277 State and county mental hospitals in this country are still little more than custodial institutions with wholly inadequate funds, personnel, and facilities for even the simplest methods of treatment.

That ends the disquisition by Secretary Flemming on the need.

The above is a bold and challenging summation of the Nation's No. 1 health problem. To the 17 million Americans suffering from mental illness, and to their distraught families, it offers promise of a sizable investment of funds to fight this raging epidemic. But I am sorry to report that the Secretary's words were just words, and that his gallant crusade was upended by the Bureau of the Budget.

FIGHT AGAINST RISE IN BUDGET

On April 30 the same New York Times headlined another story: "Flemming Fights Rise in His Budget." Among other things, Mr. Flemming was reported as fighting a small \$8 million increase appropriated by the House of Representatives for the National Institute of Mental Health for the coming year.

In appropriating approximately \$60 million for the Institute for the coming year, the House Appropriations Committee noted that this sum was many times less than the annual money savings which have already resulted during the past 3 years as a result of the intensive application of the new drugs and other medical research discoveries to the problem of mental illness.

HOUSE REPORT

I quote, Mr. Chairman, from the House report:

Recent figures presented to the committee indicate that mental illness costs this country a minimum of \$3 billion a year.

Despite the staggering economic losses, the committee received heartening evidence of remarkable progress against mental illness. Over the past 3 years, there has been a drop of 13,000 patients in State mental hospitals. At the end of 1958 there were 52,000 fewer mental patients in all mental institutions than might have been expected on the basis of the rising curve from 1945 to 1955.

I think that is the most enormous bit of progress in the entire history of our mental health efforts, since the first mental hospital was established in 1773 at Williamsburg, Va.

Just the annual money savings resulting from this reduction amount to much more than this entire appropriation if calculated on the most conservative basis. It costs an average of \$1,500 a year to provide little more than custodial care for each patient in a mental hospital and in institutions where good care and service is given the costs are much higher. Restored to a useful life this same person is earning his own living and paying taxes.

Medical research that can increase our ability to prevent chronic mental illness is the only way of eventually cutting down on the Nation's multibillion dollar annual bill for care of the mentally ill.

That ends the House comment on the appropriation.

ADMINISTRATION BUDGET BACKWARD STEP

In essence, Mr. Chairman, the administration budget for the National Institute of Mental Health for fiscal 1960 is a backward step in our fight against mental illness. For example, it allows only \$3 million to finance new research applications despite conservative projections which estimate a minimum of \$6 million in new applications just at the present rate of growth. In the face of desperate shortages of psychiatrists and allied personnel, which continue to plague State hospitals and community clinics, it cuts the number of vitally needed traineeships from 2,533 to 1,775. Despite approved applications for general practitioner training far in excess of the \$1,300,000 voted last year, and specifically allocated for that by this committee and the committee in the other body, it cuts that program back to last year's level.

Despite the important inroads we are making against mental illness, the problem is far from solved. By making a phone call to Bethesda, the administration budget makers could have learned that admissions to State mental hospitals alone have risen 25,000 in just the past 2 years. Furthermore, psychiatric admissions to general and private hospitals have set new records, while clinics in all parts of the country have waiting lists of from 6 months to 2 years.

NATIONAL COMMITTEE BUDGET REQUEST

We are therefore requesting \$79,986,000 for the operations of the National Institute of Mental Health during fiscal 1960. We predicate this requested increase on the premise that now is the time to invest heavily in psychiatric research and training programs designed to accelerate the breakthroughs already achieved.

State government is following this wise course. In just the past 2 years, appropriations for State mental hospitals have gone up from approximately \$663 million in 1956 to \$813 million in 1958. Our requested figure for the Institute is less than 10 percent of what the States are currently spending on this grave problem.

SPECIFIC REQUESTS

The following are the specific budget recommendations of the National Committee Against Mental Illness:

We are proposing \$30 million for the research grants program of the National Institute of Mental Health for the coming year.

Of this total sum, approximately \$15 million should be allocated for general research grants. While presenting no detailed breakdown of various areas where research support should be increased, we want to make a special plea for an increase in the sums allocated to research on alcoholism. This is a program in which we have made very few inroads over the years. I remember my days as a reporter some 14 years ago, Mr. Chairman, when I thought that it was very easy to cure an alcoholic. I talked with a number of psychiatrists who said to me that of all the problems they faced the most difficult was the alcoholic. And somehow this problem of alcoholic addiction is still an enormous one.

So we have a great deal to do in that area.

TITLE V PROGRAM

Now, the title V program of the Institute has become one of the most exciting developments in the entire field of psychiatry. The purpose of this program is to support new ways of handling mental illness other than in the traditional mental hospital setting. If time permitted, I could detail a number of the imaginative projects now underway—the use of emergency psychiatric teams in Boston; support for the work of doctors in private practice here in the District of Columbia in treating mental illness in the community; extramural care for older people with mental illness; day and night hospitals and a host of additional developments.

One area of title V work is of enormous interest to our committee. As the House report notes, juvenile delinquency is a problem—

of great magnitude in terms of parental distress, economic burden and loss of potentially useful citizens. * * * But there seems to be no coordinated effort to do anything about it, and no one group accepts responsibility for giving leadership in efforts to prevent or ameliorate the problem.

ATTACK ON JUVENILE DELINQUENCY

Our committee is deeply impressed with the few attempts which have been made to attack juvenile delinquency on a saturated, communitywide basis. The Henry Street Settlement group of New York City outlined before the House committee a well-designed protocol for a research study of the effectiveness of an all-out community attack on juvenile delinquency, and we think that the time is now to begin support of that kind of study.

Mr. Chairman, they are here today, and I think that they will testify after we finish.

PSYCHOPHARMACOLOGY PROGRAM

The psychopharmacology program I will just go into briefly, because Dr. Kline, a pioneer in this field, will go into that. It is just beginning to achieve its real potential. In addition to supporting vital drug research at hospitals, medical schools and research laboratories throughout the country, the Psychopharmacology Service Center has initiated a number of pilot arrangements with the pharmaceutical industry which are indications of what can be done in the years to come. After a period of initial confusion and some healthy controversy, a general consensus has developed that industry's role in the psychopharmacology program should be confined to basic research, with particular emphasis upon the mode of action of the drugs and the development of better screening techniques for testing and evaluating the many promising compounds developed in the laboratories each year.

The problem of the screening and evaluation of new drugs is a most critical one. I am happy to note that the Psychopharmacology Service Center is deeply aware of this problem, although it does not yet have the sizable funds to accomplish the task. The initial problem is one of more effective screening of compounds in animals. In its report to the Congress, the Psychopharmacology Service Center notes that its staff—

has been actively discussing with industrial scientists research needs in the area of preclinical drug screening which could best be met by grants or contracts

to nonprofit organizations, and three meetings of industrial and university scientists have been held in the last 2 months to discuss the specific needs in three special areas of screening.

TESTING OF COMPOUNDS IN CLINICAL STUDIES

Of even more importance is a need for quicker and more accurate screenings in human beings of promising compounds. During the past year, it is estimated that over 300 drugs were developed which were deemed of sufficient interest to warrant testing in patients. This involves a staggering evaluation task at the human level, as the Psychopharmacology Service Center notes in the following words in its report to the Congress:

It is also apparent that there is a major need for better early clinical studies on promising new drugs. * * * Several competent investigators are now carrying out new-drug evaluation studies, but the number of clinical units able to do effective work of this sort falls short of the need for this type of research.

In connection with the difficult job of screening promising new compounds, the NCAMI proposes that the Institute support eight pilot screening centers during the coming year. Each of these centers might cost in the neighborhood of \$250,000. We regard this as a very important proposal, since the present State mental hospitals and university teaching hospitals are far too overburdened with patient care and related problems to finance elaborate screening programs. Dr. Nathan Kline will present this proposal in more detail in his testimony.

NEED OF TRAINED RESEARCH WORKERS

A second need in the field of psychopharmacology is the training of research workers in psychopharmacology. The pharmaceutical industry has enormous laboratory and other resources far beyond the financial capacity of our medical schools and research foundations. I have talked to a number of leaders in the pharmaceutical industry about this problem, and they agree that industry could play a vital part in the training of research fellows in psychopharmacology. In fact, there are several informal training arrangements now in existence between universities and pharmaceutical companies.

Commenting with favor upon this development, the Psychopharmacology Service Center had this to say in its official report to Congress:

Considerable interest has been expressed in the use of the well-equipped interdisciplinary groups now available in some company laboratories for the training of research workers in pharmacology and psychology at both the pre- and post-doctoral levels through cooperative relationships with graduate departments in nearby universities and medical schools.

We propose that approximately \$1 million be allocated to this psychopharmacology training program during the first year. We leave it to the wisdom of the Psychopharmacology Service Center to determine how much of this training can be done within industry and how much can be done in academic institutions. Our major concern is with the problem, not with the mechanism used to solve it. We are deeply concerned with testimony received by the House of Representatives that the critical shortage of clinical pharmacologists in the United States is the major bottleneck in the discovery and application of better drugs for mental illness. Numerous positions currently budgeted from psychopharmacologists and neuropharmacol-

ogists in medical schools, pharmaceutical laboratories, and private research institutions are vacant today because of the lack of an aggressive training program in this field.

PROPOSED BUDGET FOR PSYCHOPHARMACOLOGY

In sum, we are proposing \$10 million for the psychopharmacology program during the coming year—a modest increase of \$1 million in the basic drug research program, including additional projects with industry; \$2 million for the establishment of screening centers; and \$1 million for training.

Just one observation on the aforementioned proposals. We respectfully suggest that these sums be not considered inflexible. Availability of manpower and many other considerations frequently determine the speed with which a program can get off the ground. If one part of the program is held back because of any one of a number of obstacles, we hope that the appropriation can be transferred to another area in the broad field of psychopharmacology.

The important thing is strong continuing support for drug research. We feel that we are proposing a modest and realistic increase in the psychopharmacology program until it moves out of the pilot stage. As you well know, the cancer chemotherapy program has moved forward much more rapidly during the past 5 years—from approximately \$1 million in fiscal 1954 to \$23 million in fiscal 1959. We hope to achieve a like momentum in the next several years in the field of psychopharmacology—God, Mr. Flemming, and the Bureau of the Budget willing.

RESEARCH FELLOWSHIPS

Now, in the area of research fellowships, the current appropriation for research fellowships is only \$1,396,000. Despite the fact that this is roughly double the previous year's appropriations, applications on hand already far exceed the money available. Considering the current critical shortage of competent research workers, it is nothing short of tragic that this research fellowship program has been starved over the past few years.

We propose that this program be increased by \$1 million in the coming year, with at least one-half of the increase being devoted to research fellowships in the biology of mental illness.

The great need today is for more professionally trained personnel in all fields of mental health—

Secretary Flemming stated on April 21.

The American Psychiatric Association in December 1957 published results of a study of professional staffs in public mental hospitals as of 1956. This study shows that the number of physicians, psychiatrists, registered nurses, and other nurses and attendants was grossly inadequate * * *. Because of the shortages, I am told that the potentials inherent in the new tranquilizing drugs are as yet largely unrealized.

Senator HILL. You mean by that we do not have the personnel to take advantage of the knowledge that we now have; is that right?

PERSONNEL LACK HINDERS TREATMENT

Mr. GORMAN. Mr. Chairman, I think Dr. Kline in his testimony will speak a little more to that. I would say from my personal ob-

servations and from a visit to Dr. Kline's mental hospital only 3 weeks ago, it is a crime that thousands of patients cannot receive these new medications under proper supervision because there is a lack of psychiatrists, psychologists, and so forth—the very things that Mr. Flemming talks about. There is not a hospital in the United States today that meets the standards of the American Psychiatric Association for personnel.

Mr. Chairman, despite the fine words, the present administration has recommended a sum for training which will cut the number of available traineeships one-third under last year's figure. Shocked at this cut, Representative Fogarty asked Dr. Robert Felix if it meant there were enough psychiatrists and other personnel to handle the problem of mental illness. Here is Dr. Felix's answer:

No, sir, there are not enough psychiatrists or other personnel. We do not have enough. We could use additional funds next year. In fact, if we do not get additional funds next year, we will go back.

We are asking an increase of about \$8 million in these general training programs. At least \$2 million of this increase should go to the excellent program designed to train potential research workers in a broad variety of biological and psychological disciplines. As we have pointed out for the past several years, only two medical schools are currently receiving money to support this program, and there are only 85 fellows in the entire national program. We understand that there are scores of applications from various university departments indicating their willingness to participate in this program.

We cannot understand the administration's position on this issue. On the one hand, it continually protests that it cannot support more research grants because there are not enough competent research workers in the country. On the other hand, it refuses to recommend the money to train these needed research workers and, in effect, slams the door on scores of institutions which are willing to provide this training.

TRAINING FOR GENERAL PRACTITIONERS

For the training of the general practitioner, the administration recommends the same sum as last year—\$1,300,000. Again, this sum was provided by Congress and not by the administration last year.

Senator HILL. We started that last year, did we not?

Mr. GORMAN. Yes, Mr. Chairman, on the recommendation of both the House and the Senate Appropriations Committees, this program was begun.

Although this program only got underway last fall, the demand for it has far exceeded the fondest expectations of those of us who testified for its creation. For the two phases of the program—the support of general practitioners taking a 3-year psychiatric residency, and the support of pilot projects in methods of training general practitioners who want to remain family physicians but increase their psychiatric skills—there are on hand many more applications than can be granted under the present inadequate appropriation.

Mr. Chairman, within the past week I received calls from two general practitioners right here in the District of Columbia. Both have closed expensive and lucrative practices to get into this program. They have been approved for the general practitioner program, both

to start on July 1, but have received no assurance on these stipends, because of the administration's refusal to expand the program.

Now, this is an urgent program, Mr. Chairman. These family physicians, although they will have to make enormous sacrifices, cannot subsist on Mr. Flemming's eloquent words on the desperate need for more personnel. I get 5, 6, 8, and 10 calls a week—no exaggeration—from general practitioners who say, "We have heard about this new program. It is a wonderful thing. We want to be trained. What do we do?"

They make application, are approved, and then they get a little note that says, "Sorry. We can't give you the money this year. We don't have it."

I think that is shocking, especially when put in relation to the Secretary's words about the needs in the training field.

HOUSE COMMENT ON GENERAL PRACTITIONER PROGRAM

Noting that this program had just gotten underway during the past year, the House Appropriations Committee reported and I quote, that:

It has been received with unprecedented enthusiasm by the medical profession despite the newness of the program. The Institute has been unable to finance many of the applications from all parts of the country. Since the family physician is dispensing the greatest quantity of the new drugs, it is absolutely vital that he receive the psychiatric education he so avidly seeks. It will be expected that this program be expanded in 1960.

FUNDS REQUESTED FOR PROGRAM

We are therefore requesting \$5 million for this program during fiscal 1960. This increase is mandated, in part, by the nature of the program. For example, all the general practitioners who have begun the first year of psychiatric residency must take a minimum of 2 more years of training before being eligible for certification. By holding the program to last year's level, the administration closes the door on any new applications for the coming year. Since the average stipend under this program runs about \$10,000 a year, adding only 100 new fellows costs \$1 million the first year. We are hopeful that at least 200 new fellows can be started; this will cost about \$2 million during fiscal 1960.

The short-term training of general practitioners who want to increase their psychiatric skills is just as important. A recent survey by the general practitioner education project of the American Psychiatric Association pointed up the scarcity of psychiatric training opportunities open to the average family physician. In many parts of the country there is absolutely no place where the general practitioner can go for advanced psychiatric training.

The remainder of my statement, Mr. Chairman, deals in detail with the grants for clinics and the intramural operations of the National Institute of Mental Health, which, if I may, I would like to file for the record.

Senator HILL. It will all appear in the record, Mr. Gorman.
(The statement referred to follows:)

STATEMENT OF MIKE GORMAN, EXECUTIVE DIRECTOR, NATIONAL COMMITTEE
AGAINST MENTAL ILLNESS

Mr. Chairman and members of the committee, on April 21 the New York Times ran a headline, "Flemming Pleads for Mentally Ill," over a story covering a press conference held the previous day by Secretary of Health, Education, and Welfare Arthur S. Flemming.

"Tens of thousands of mentally ill patients in our Nation today are receiving disgracefully inadequate care and treatment," Mr. Flemming stated at his press conference. "While there has been some encouraging progress against mental illness in recent years, the situation as a whole is one that I believe the American people would find genuinely shocking if they knew the facts."

Mr. Flemming continued with a biting criticism of our present financial support of efforts to fight mental illness. Here are the Secretary's own words in all their eloquent simplicity:

"One thing, however, is clear: The resources we are devoting to mental illness today fall dreadfully short of meeting the problem. We have not yet mounted an effective attack on mental illness in this country. The fact is we are barely holding the line * * *. Many of the 277 State and county mental hospitals in this country are still little more than custodial institutions with wholly inadequate funds, personnel, and facilities for even the simplest methods of treatment."

The above is a bold and challenging summation of the Nation's No. 1 health problem. To the 17 million Americans suffering from mental illness, and to their distraught families, it offers promise of a sizable investment of funds to fight this raging epidemic. But I am sorry to report that the Secretary's words were just words and that his gallant crusade was upended by the Bureau of the Budget.

On April 30 the same New York Times headlined another story, "Flemming Fights Rise in His Budget." Among other things, Mr. Flemming was reported as fighting a small \$8 million increase appropriated by the House of Representatives for the National Institute of Mental Health for the coming year.

In appropriating approximately \$60 million for the Institute for the coming year the House Appropriations Committee noted that this sum was many times less than the annual money savings which have already resulted during the past 3 years as a result of the intensive application of the new drugs and other medical research discoveries to the problem of mental illness. I quote, Mr. Chairman, from the House report:

"Recent figures presented to the committee indicate that mental illness costs this country a minimum of \$3 billion a year.

"Despite the staggering economic losses, the committee received heartening evidence of remarkable progress against mental illness. Over the past 3 years there has been a drop of 13,000 patients in State mental hospitals. At the end of 1958 there were 52,000 fewer mental patients in all mental institutions than might have been expected on the basis of the rising curve from 1945 to 1955.

"Just the annual money savings resulting from this reduction amount to much more than this entire appropriation if calculated on the most conservative basis. It cost an average of \$1,500 a year to provide little more than custodial care for each patient in a mental hospital, and in institutions where good care and service is given the costs are much higher. Restored to a useful life, this same person is earning his own living and paying taxes.

"Medical research that can increase our ability to prevent chronic mental illness is the only way of eventually cutting down on the Nation's multi-billion-dollar annual bill for care of the mentally ill."

In essence, Mr. Chairman, the administration budget for the National Institute of Mental Health for fiscal 1960 is a backward step in our fight against mental illness. For example, it allows only \$3 million to finance new research applications despite conservative projections which estimate a minimum of \$6 million in new applications just at the present rate of growth. In the face of desperate shortages of psychiatrists and allied personnel, it cuts the number of vitally needed traineeships from 2,533 to 1,775. Despite approved applications for general practitioner training far in excess of the \$1,300,000 voted last year, it cuts that program back to last year's level.

Despite the important inroads we are making against mental illness, the problem is far from solved. By making a phone call to Bethesda, the administration budgetmakers could have learned that admissions to State mental hospitals alone have risen 25,000 in just the past 2 years. Furthermore, psychiatric admissions to general and private hospitals have set new records, while clinics in all parts of the country have waiting lists of from 6 months to 2 years.

We are therefore requesting \$79,986,000 for the operation of the National Institute of Mental Health during fiscal 1960. We predicate this requested increase on the premise that now is the time to invest heavily in psychiatric research and training programs designed to accelerate the breakthroughs already achieved.

State government is following this wise course. In just the past 2 years, appropriations for State mental hospitals have gone up from approximately \$663 million in 1956 to \$813 million in 1958. Our requested figure for the Institute is less than 10 percent of what the States are currently spending on this grave problem.

The following are the specific budget recommendations of the National Committee Against Mental Illness:

Research

We are proposing \$30 million for the research grants program of the National Institute of Mental Health for the coming year.

Of this total sum, approximately \$15 million should be allocated for general research grants. While presenting no detailed breakdown of various areas where research support should be increased, we want to make a special plea for an increase in the sums allocated to research on alcoholism. This is a staggering problem—it is estimated that there are 5 million alcoholics in this country today. We know shamefully little about physiological addiction to alcohol beyond the general suspicion that the metabolisms of many individuals are so constituted that alcohol seems to answer a physiological craving similar to the craving for food in an undernourished person.

Through the action of the Congress last year, a modest \$300,000 research program on alcoholism is now getting underway. We think the research phase of this program should be lifted to a minimum of about \$1 million during the coming year.

The title V program of the Institute has become one of the most exciting developments in the entire field of psychiatry. The purpose of this program is to support new ways of handling mental illness other than in the traditional mental hospital setting. If time permitted, I could detail a number of the imaginative projects now underway—the use of emergency psychiatric teams in Boston; support for the work of doctors in private practice here in the District of Columbia in treating mental illness in the community; extramural care for older people with mental illness; day and night hospitals and a host of additional developments.

One area of title V work is of enormous interest to our committee. As the House report notes, juvenile delinquency is a problem “of great magnitude in terms of parental distress, economic burden, and loss of potentially useful citizens * * *. But there seems to be no coordinated effort to do anything about it, and no one group accepts responsibility for giving leadership in efforts to prevent or ameliorate the problem.”

Our committee is deeply impressed with the few attempts which have been made to attack juvenile delinquency on a saturated, communitywide basis. The Henry Street Settlement group of New York City outlined before the House committee a well-designed protocol for a research study of the effectiveness of an all-out community attack on juvenile delinquency, and we think that the time is now to begin support of that kind of study.

The title V program, currently running at about \$2,800,000 a year, has already accumulated a sizable backlog of worthwhile project applications which cannot be granted because of insufficient funds. It is therefore suggested that this program be at least doubled during the coming year.

The psychopharmacology program I will just go into briefly, because Dr. Kline, a pioneer in this field, will go into that. It is just beginning to achieve its real potential. In addition to supporting vital drug research at hospitals, medical schools, and research laboratories throughout the country, the Psychopharmacology Service Center has initiated a number of pilot arrangements with the pharmaceutical industry which are indications of what can be done in the years

to come. After a period of initial confusion and some healthy controversy, a general consensus has developed that industry's role in the psychopharmacology program should be confined to basic research, with particular emphasis upon the mode of action of the drugs and the development of better screening techniques for testing and evaluating the many promising compounds developed in the laboratories each year.

The problem of the screening and evaluation of new drugs is a most critical one. I am happy to note that the Psychopharmacology Service Center is deeply aware of this problem, although it does not yet have the sizable funds to accomplish the task. The initial problem is one of more effective screening of compounds in animals. In its report to the Congress, the Psychopharmacology Service Center notes that its staff "has been actively discussing with industrial scientists research needs in the area of preclinical drug screening which could best be met by grants or contracts to nonprofit organizations, and three meetings of industrial and university scientists have been held in the last 2 months to discuss the specific needs in three special areas of screening."

Of even more importance is a need for quicker and more accurate screenings in human beings of promising compounds. During the past year, it is estimated that over 300 drugs were developed which were deemed of sufficient interest to warrant testing in patients. This involves a staggering evaluation task at the human level, as the Psychopharmacology Service Center notes in the following words in its report to the Congress:

"It is also apparent that there is a major need for better early clinical studies on promising new drugs * * *. Several competent investigators are now carrying out new drug evaluation studies; but the number of clinical units able to do effective work of this sort falls short of the need for this type of research."

In connection with the difficult job of screening promising new compounds, the NCAMI proposes that the Institute support eight pilot screening centers during the coming year. Each of these centers might cost in the neighborhood of \$250,000. We regard this as a very important proposal, since the present State mental hospitals and university teaching hospitals are far too overburdened with patient care and related problems to finance elaborate screening programs. Dr. Nathan Kline will present this proposal in more detail in his testimony.

A second need in the field of psychopharmacology is the training of research workers in psychopharmacology. The pharmaceutical industry has enormous laboratory and other resources far beyond the financial capacity of our medical schools and research foundations. I have talked to a number of leaders in the pharmaceutical industry about this problem, and they agree that industry could play a vital role in the training of research fellows in psychopharmacology. In fact, there are several informal training arrangements now in existence between universities and pharmaceutical companies.

Commenting with favor upon this development, the Psychopharmacology Service Center had this to say in its official report to Congress:

"Considerable interest has been expressed in the use of the well-equipped interdisciplinary groups now available in some company laboratories for the training of research workers in pharmacology and psychology at both the pre- and post-doctoral levels through cooperative relationships with graduate departments in nearby universities and medical schools."

We propose that approximately \$1 million be allocated to this psychopharmacology training program during the first year. We leave it to the wisdom of the Psychopharmacology Service Center to determine how much of this training can be done within industry and how much can be done in academic institutions. Our major concern is with the problem, not with the mechanism used to solve it. We are deeply concerned with testimony received by the House of Representatives that the critical shortage of clinical pharmacologists in the United States is the major bottleneck in the discovery and application of better drugs for mental illness. Numerous positions currently budgeted for psychopharmacologists and neuropharmacologists in medical schools, pharmaceutical laboratories and private research institutions are vacant today because of the lack of an aggressive training program in this field.

In sum, we are proposing \$10 million for the psychopharmacology program during the coming year—a modest increase of \$1 million in the basic drug research program, including additional projects with industry; \$2 million for the establishment of screening centers, and \$1 million for training.

Just one observation on the aforementioned proposals. We respectfully suggest that these sums be not considered inflexible. Availability of manpower and many other considerations frequently determine the speed with which a program can get off the ground. If one part of the program is held back because of any one of a number of obstacles, we hope that the appropriation can be transferred to another area in the broad field of psychopharmacology.

The important thing is strong continuing support for drug research. We feel that we are proposing a modest and realistic increase in the psychopharmacology program until it moves out of the pilot stage. As you well know, the cancer chemotherapy program has moved forward much more rapidly during the past 5 years—from approximately \$1 million in fiscal 1954 to \$23 million in fiscal 1959. We hope to achieve a like momentum in the next several years in the field of psychopharmacology.

Research fellowships

The current appropriation for research fellowships is only \$1,396,000. Despite the fact that this is roughly double the previous year's appropriation, applications on hand already far exceed the money available. Considering the current critical shortage of competent research workers, it is nothing short of tragic that this research fellowship program has been starved over the past few years.

We propose that this program be increased by \$1 million in the coming year, with at least one-half of the increase being devoted to research fellowships in the biology of mental illness.

Training

"The great need today is for more professionally trained personnel in all fields of mental health," Secretary Flemming stated on April 21. "The American Psychiatric Association in December 1957 published results of a study of professional staff in public mental hospitals as of 1956. This study shows that the number of physicians, psychiatrists, registered nurses and other nurses and attendants was grossly inadequate * * *. Because of the shortages, I am told that the potentials inherent in the new tranquilizing drugs are as yet largely unrealized."

Despite these fine words, the present administration has recommended a sum for training which will cut the number of available traineeships one-third under last year's figure. Shocked at this cut, Representative Fogarty asked Dr. Robert Felix if it meant there were enough psychiatrists and other personnel to handle the problem of mental illness. Here is Dr. Felix' answer:

"No, sir, there are not enough psychiatrists or other personnel. We do not have enough. We could use additional funds next year. In fact, if we do not get additional funds next year, we will go back."

We are asking an increase of about \$8 million in these general training programs. At least \$2 million of this increase should go to the excellent program designed to train potential research workers in a broad variety of biological and psychological disciplines. As we have pointed out for the past several years, only two medical schools are currently receiving money to support this program, and there are only 85 fellows in the entire national program. We understand that there are scores of applications from various university departments indicating their willingness to participate in this program.

We cannot understand the administration's position on this issue. On the one hand, it continually protests that it cannot support more research grants because there aren't enough competent research workers in the country. On the other hand, it refuses to recommend the money to train these needed research workers and, in effect, slams the door on scores of institutions which are willing to provide this training.

For the training of the general practitioner, the administration recommends the same sum as last year—\$1,300,000. Although this program only got underway last fall, the demand for it has far exceeded the fondest expectations of those of us who testified for its creation. For the two phases of the program—the support of general practitioners taking a 3-year psychiatric residency, and the support of pilot projects in methods of training general practitioners who want to remain family physicians but increase their psychiatric skills—there are on hand many more applications than can be granted under the present inadequate appropriation.

Noting that this program had just gotten underway during the past year, the House Appropriations Committee reported that "it has been received with un-

precedented enthusiasm by the medical profession despite the newness of the program. The Institute has been unable to finance many of the applications from all parts of the country. Since the family physician is dispensing the greatest quantity of the new drugs, it is absolutely vital that he receive the psychiatric education he so avidly seeks. It will be expected that this program be expanded in 1960."

We are therefore requesting \$5 million for this program during fiscal 1960. This increase is mandated, in part, by the nature of the program. For example, all the general practitioners who have begun the first year of psychiatric residency must take a minimum of 2 more years of training before being eligible for certification. By holding the program to last year's level, the administration closes the door on any new applications for the coming year. Since the average stipend under this program runs about \$10,000 a year, adding only 100 new fellows costs \$1 million the first year. We are hopeful that at least 200 new fellows can be started; this will cost about \$2 million during fiscal 1960.

The short-term training of general practitioners who want to increase their psychiatric skills is just as important. A recent survey by the general practitioner education project of the American Psychiatric Association pointed up the scarcity of psychiatric training opportunities open to the average family physician. In many parts of the country, there is absolutely no place where the general practitioner can go for advanced psychiatric training.

Again, in the interest of flexibility and because the program is so new, we suggest that the Institute be permitted to relate its support to the level of applications and to the availability of training manpower.

Grants for clinics

We suggest an increase of \$1 million over the sum of \$4 million recommended by the administration. The big need here is Federal matching support for clinics and other preventive services in the poorer and less populous States. In the larger States, State and local contributions for clinics and other community mental health services frequently run 10 and even 20 times the size of the Federal contribution. However, in a number of the poorer States the basic Federal grant of \$25,000 is far from adequate. With the additional funds proposed, we suggest that the minimum matching allocation to a State for expansion of clinical services be raised from \$25,000 to \$50,000.

DIRECT OPERATIONS

Research

We recommend that the intramural research program of the Institute be lifted to a level of about \$8 million—an increase of a little over a million dollars more than the administration recommendation. This modest increase would allow additional money for drug addiction studies at Lexington, some increase in the intramural program in psychopharmacology, an expansion of the vitally important collaborative research project recently inaugurated at St. Elizabeths, greater support for studies at the Clinical Center, and a well-deserved boost for the excellent statistical and evaluation work of the Biometrics Branch of the Institute.

We would also like to see a modest expansion of the various technical assistance staffs of the Institute. As the various grant programs have grown over the past few years, the demands upon the Institute staff have far exceeded its present capacity. Again the administration has been derelict in not asking the Congress for additional appropriations with which to employ more technical staff for the Institute. We would remind the administration, which is constantly celebrating the virtues of local community effort, that the Institute has been unable for the past several years to supply all the technical help and assistance requested by the States and by scores of local communities. We therefore suggest the following increases in Institute staff programs:

Review and approval

An increase from the current \$863,000 to \$1,250,000 in 1960. The basis for this increase is an obvious one—each year more and more research and training grant applications have to be considered, and it is important that they receive both prompt and careful technical scrutiny. It has come to our attention that, in some areas, consideration and support of worthwhile projects have been held up for long periods of time because of a shortage of the technical manpower needed to review the applications.

Professional and technical assistance

We recommend an increase in this area from the current \$1,730,000 to \$2 million in the coming year. The major justification for this increase has been discussed previously, but it is important to note that this technical assistance to State, local, and private effort is particularly needed in psychopharmacology, drug addiction, alcoholism, mental retardation, and the general practitioner training program.

Administration

We recommend an increase of about \$280,000 above the \$362,000 appropriated for fiscal 1959.

Here again it is obvious you need more central staff positions to carry out the ever-widening responsibilities of the Institute. A great number of major programs have been added these last few years—psychopharmacology, title V, general practitioner, training of research workers, etc. The Institute has had no comparable increase in the professional manpower required to plan and direct these programs. We understand that this shortage of key administrative personnel has reached critical proportions, and we strongly urge this committee to rectify this growing imbalance between expanding grant programs and a limited technical staff responsible for their success or failure.

There is a related problem which does not fall directly within the purview of this committee, but it is one of great importance. Put very simply, the salary scales at the Institute are much too low. In obtaining qualified professional staff, the Institute must now compete with much higher salaries paid by State mental health departments, and even, in some cases, local community mental health boards. If the Institute is to continue its position of leadership as the major psychiatric arm of our National Government, the salaries it can pay to its professional and administrative personnel must be increased all along the line.

Appended to this statement is the detailed budget request of the National Committee Against Mental Illness for the fiscal 1960 operations of the National Institute of Mental Health.

National Institute of Mental Health

	Fiscal 1959 appropriation	Citizens request, fiscal 1960
Grants:		
Research grants.....	\$18, 834, 000	\$30, 600, 000
Title V.....	¹ (2, 800, 000)	¹ (5, 600, 000)
Psychopharmacology.....	¹ (6, 000, 000)	¹ (10, 000, 000)
Research fellowships.....	1, 396, 000	2, 396, 000
Training.....	18, 213, 000	30, 000, 000
General practitioner.....	¹ (1, 300, 000)	¹ (5, 000, 000)
Grants for clinics and other preventive services.....	4, 000, 000	5, 000, 000
Direct operations:		
Research.....	6, 921, 000	8, 000, 000
Review and approval.....	863, 000	1, 250, 000
Training activities.....	100, 000	100, 000
Professional and technical assistance.....	1, 730, 000	2, 000, 000
Administration.....	362, 000	640, 000
Total.....	52, 419, 000	79, 986, 000

¹ Items in parentheses are subdivision breakdowns of particular program totals.

DEVELOPMENT OF PSYCHOPHARMACOLOGY

Mr. GORMAN. And that concludes my statement.

Senator HILL. You have brought us a very, very excellent statement.

Shall we hear from Dr. Kline before asking any questions?

Dr. Kline, we shall be delighted to hear from you at this point.

Dr. KLINE. A very brief 5 years ago I was privileged to present testimony to the effect that drugs capable of improving psychiatric patients had been identified. Despite skepticism on the part of some

professional colleagues, this committee judged the evidence to be sufficient to appropriate \$2 million for the investigation of these psychopharmaceuticals. At that time there existed perhaps half a dozen articles in all of the world's medical literature discussing the usefulness of these preparations. Only recently I completed a review of similar articles published in 1958. They totaled more than 1,000 with representation from every major country in the world.

Quite by coincidence, for another purpose, I happened to bring along a listing of these things for the National Institute, and I note here that these are about 90 percent of the ones in my personal file, and there are 3,275 references. So that this is quite a change.

In addition, there are more than a dozen books on the subject, an international society has been founded, and two new journals have been started, to help provide for the outlet for this flood of important and useful information about drugs which are expanding our ability to understand and to treat mental illness.

Senator HILL. Two new journals started here in the United States?

Dr. KLINE. Two journals, one in the United States, and one is an international journal.

Senator HILL. Where is the international journal published?

Dr. KLINE. It is published in Switzerland. But their editors are from all the major countries of the West.

It is now almost universally agreed that the introduction of psychopharmaceuticals constitutes the most important advance in psychiatry in the past 50 years. It has been the congressional support (which was \$6 million last year and which needs to total \$10 million this year), that has made possible some of the essential research on mechanisms of action of the new drugs which pharmaceutical houses have produced. This support has also helped insure that they were applied with promptness and vigor.

RECENT DISCOVERIES AND TESTS

During the past year the most important development in terms of psychiatric treatment was the discovery and testing of a sizable number of new compounds for use in the treatment of depression, apathy, and withdrawal.

I might add parenthetically that depression is probably the most common of all psychiatric syndromes. The reason that it does not receive attention is the old saw that it is the squeaky wheel that gets the most grease; and many depressed patients simply quietly sink under and do not cause the disturbance that other types of mental illness do.

Senator HILL. They quietly give up the ghost.

Dr. KLINE. That is unfortunately the case. Was it Thoreau who said, "Most men lead lives of quiet desperation"?—or quiet depression.

FIRST PRESENTATION IN SENATE HEARINGS

The first presentation of a new group of drugs was in April of 1957, and it is interesting that the first printed article to appear on the use of these psychic energizers, as they are called, appeared in a medical publication known as the hearings of the Senate Health, Education,

and Welfare Appropriations Committee about a month later. So that the first publication in this field was actually as a result of the hearings here.

One year later, over 400,000 patients had been treated, which gives you some idea of the immensity of the need for medication of this sort, and this was with the one preparation which was then available, iproniazid, which was the drug referred to in the original article. Since that time, there have been produced quite a number of other compounds which hopefully will be on the market later this year. They have already been presented at quite a number of scientific meetings, and their value is indisputably established; one produced by a pharmaceutical house in Milwaukee; another in New Jersey; and a third in New York. These are the ones that will probably be the first on the market. And also the general interest has stimulated research in other types of antidepressant drugs.

One of the major difficulties, however, is in determining which preparation is effective, despite the lack of adequate equipment and personnel with which to carry out the clinical testing on the patients. And the major part of the requested \$4 million increase in funds is to improve this specific situation. In preparing a chemical, you usually prepare not a single drug but a whole family of compounds. And the question then comes up: Which of this group of drugs is the most useful? And although animal screening is of some use for determining the toxicity of the drug, it is as yet not of great use in determining which is going to be the most effective drug. So that the final test is the trial on patients. And the difficulty is that the facilities for clinically evaluating which drugs are good are at this point extremely inadequate. Even at Rockland State, where I feel certain our facilities are as good as anywhere else, we know how limited we are as to what we would like to do.

PERSONNEL PROBLEMS IN RESEARCH

I would point out that in order to have additional attendants or nurses or doctors to observe patients, it is not an 8-hour day, 5-day week, job. It is a 24-hour day, 7-day week, job. I have given a breakdown indicating that even to add two attendants and a physician and a nurse for a group of patients runs close to a quarter of a million dollars. So that this research is something which in all truth a pharmaceutical house would find it terribly difficult to justify and to afford; and since it certainly is of benefit to the national welfare, it is in my opinion quite appropriate that it be supported by the Congress.

If the pharmaceutical houses actually had to carry the full cost of adequate drug evaluation, there would be few new drugs. And to that end, I would point out that to evaluate toxicity in a dog of a single drug costs \$20,000 on the average. And if the cost of evaluations in patients had to be borne, I am afraid that we would not be making the remarkable progress that we are.

PROPOSED RESEARCH CENTERS

So that the proposal is to establish four to six research centers at an estimated expenditure of somewhere between a quarter and a half a million dollars a year, which would serve a threefold function, to

evaluate extra dozens of potentially valuable compounds, and, as Mr. Gorman has pointed out, the identification of even one of these would well justify the cost of the investment; and secondly, to develop techniques of drug evaluations which could be used elsewhere; and thirdly, to provide a place for training the additional personnel that is so badly needed. And \$2 million is requested specifically for this purpose.

OTHER FUNDS REQUESTS

The other funds that are requested are \$1 million for the expansion of the grant program, which, as has already been indicated, will actually go backward if it is not augmented, and the other million dollars is for training, with the stress on training in research methodology, which is the great lack at the present time.

By way of comment rather than criticism, I think it would be useful for the Psychopharmacology Service Center to provide the kinds of information about publications, both in this country and elsewhere that apparently the Russians have been able to do. And the policy has been sort of indecisive, and I think we ought to take a strong stand that supplying information to the investigators and to the clinics is a major factor, because otherwise we overlook treatment opportunities and duplicate work which has already been done.

I have also included a plea for realistic support of the personnel working in this field, and to this end I would merely at this point like to quote Mr. Greenewalt's book, "The Uncommon Man." And as president of Du Pont, he points out that, to quote him:

The take-home pay of the top rank Russian professor is just about equivalent to my own compensation from the Du Pont Co.

So that our failure to adequately support researchers and people working in this field has certainly been one of the major factors in not having made the progress that we could. And it is remarkable that we have done as well as we have.

PSYCHIATRIC RESEARCH CENTER IN HAITI

The next to the final point that I would like to present I felt would be of particular interest to you, namely, that with the support of a number of the pharmaceutical houses, and also with a small grant from the National Institute of Mental Health, we have instituted a psychiatric research center in Haiti. I know you are interested in international health and, if I may, I would like to show you four or five pictures of the conditions down there.

The hospital there is a converted marine barrack, which was abandoned by the U.S. Marines some 25 years ago. And the conditions are almost incredible, particularly when you think that this is within a few hours of the United States.

The final picture of the lot shows the almost completed clinic, which is now completed and in operation. It gives you some idea of the need for psychiatric care elsewhere in the world.

I would also add that the Government of Pakistan, on the basis of the work in Haiti, has invited us to see whether it would be feasible to establish a similar clinic there, and Pfizer International is supporting our trip to see whether this can be worked out.

DISEASES OF THE AGED

Finally, as medical progress makes possible the increasing of life, increasing attention should be paid to the diseases of the aged, and there is probably none more important than cerebral arteriosclerosis. The admission rate of seniles to mental hospitals in New York State has risen from 10 percent a quarter of a century ago to an estimated 30 percent at the present time. This constitutes but a bare index of the magnitude of the problem, since there are literally millions of our population who suffer from some degree of arteriosclerosis which is severe enough to materially interfere with mental and emotional function but has not yet reached the stage where institutionalization is required. The fact that almost everyone past 40 suffers to some extent from this condition has been recognized by a few authorities. Because we presently have no adequate methods of treatment should under no circumstances lead us to neglect or underestimate the magnitude of the problem.

PREVALENCE OF ARTERIOSCLEROSIS

In the normal course of events, responsibility in almost any occupation increases with age and experience, but so does arteriosclerosis. The Congress of the United States is not typical because the senior citizens of this body are remarkably alert, emotionally stable, and free of the more serious consequence of hardening of the arteries of the brain: If they were not in this excellent condition it is highly dubious if they could manage to be reelected to office.

Senator HILL. You mean they could not go through a campaign?

Dr. KLINE. They could not make the campaign.

Senator HILL. I admit it is pretty strenuous, doctor.

Dr. KLINE. I see no evidences of severe arteriosclerosis in any of the members present.

As I say, they are therefore a screened and very select group.

In many other fields such as industry or the academic world this is not always the case and consequently at times important and crucial decisions are made by individuals who should be qualified because of age and experience, but whose judgment is defective due to cerebral arteriosclerosis.

LACK OF RESEARCH ON ARTERIOSCLEROSIS

The paucity of research in this area is frightening and the reason usually given is that there is so little that can be done. Rather than repelling us, our lack of knowledge ought to act as a stimulous: It was ignorance and the recognition and acknowledgment of ignorance that led to the development of the antibiotics, polio vaccines, pharmaceutical treatment of schizophrenia and depression, and it is out of this same magnificent recognition of ignorance that adequate treatment for cerebral arteriosclerosis will come. In our own way in our own research unit at Rockland State Hospital we have begun some pilot investigations into possible treatment for cerebral arteriosclerosis. In terms of the magnitude of the problem the numbers of research projects is sorely limited and we have hardly begun to face the issue. We are under strong obligation to the citizens of the United States, who have

entrusted us with the responsibility to attack the problem of cerebral arteriosclerosis as we have done so successfully with other diseases.

The knowledge on which this advance rests comes from the researchers, the pharmaceutical houses, and significantly from congressional appropriations. It is to further work of this sort which provides life, health, and efficiency for ourselves and others that the present budget for the National Institute of Mental Health is requested.

Thank you.

If I may, sir, I would like to submit the testimony for inclusion.

Senator HILL. We will make certain that your testimony appears in full in the record, because you have brought us another very excellent statement, which we deeply appreciate, Doctor.

(The statement referred to follows:)

STATEMENT OF NATHAN S. KLINE, M. D., DIRECTOR, RESEARCH FACILITY, ROCKLAND STATE HOSPITAL, ORANGETOWN, N.Y., AND ASSISTANT CLINICAL PROFESSOR OF PSYCHIATRY, COLLEGE OF PHYSICIANS AND SURGEONS, COLUMBIA UNIVERSITY, NEW YORK, N.Y.

A very brief 5 years ago I was privileged to present testimony to the effect that drugs capable of improving psychiatric patients had been identified. Despite skepticism on the part of some professional colleagues, this committee judged the evidence to be sufficient to appropriate \$2 million for the investigation of these psychopharmaceuticals. At that time there existed perhaps half a dozen articles in all of the world's medical literature discussing the usefulness of these preparations. Only recently I completed a review of similar articles published in 1958. They totaled more than 1,000 with representation from every major country in the world. In addition there are more than a dozen books on the subject. An international society (The Collegium Internationale Neuro-Psychopharmacologicum) has been founded and two new journals have been started which will help provide an outlet for the increasing flood of important and useful information about these drugs which are expanding our ability to understand and treat mental disease.

It is now almost universally agreed that the introduction of psychopharmaceuticals constitutes the most important advance in psychiatry in the past 50 years. It has been the congressional support (which was \$6 million last year and which needs to total \$10 million this year), that has made possible some of the essential research on mechanisms of action of the new drugs which pharmaceutical houses have produced. This support has also helped insure that they were applied with promptness and vigor.

During the past year the most important development in terms of psychiatric treatment was the discovery and testing of a sizable number of new compounds for use in the treatment of depression, apathy, and withdrawal. Presented at a meeting in April 1957, the first printed article to appear anywhere on the use of psychic energizers (as these preparations are called) appeared in the records of the Senate Health, Education, and Welfare hearings only a month later. One year later over 400,000 patients had been treated with iproniazid (Marsilid), the drug referred to in this original article. This gives some idea of its need and importance. Other companies also have similar drugs well along and almost ready for marketing. Another laboratory which pioneered with amine oxidase inhibitors has produced an effective drug, phenelzine sulfate (Nardil), and a relatively small but unusually active pharmaceutical house in Milwaukee, Wis., has developed PIH (Catron) which is also among the active antidepressants. It is expected that both of these will be marketed this year. At least another dozen pharmaceutical houses have produced other preparations in this field such as nialamid (Niamid), which are presently being evaluated. Imipramine (Tofranil) is also an antidepressant which is most effective in a somewhat different type of patient.

In other psychopharmaceutical areas there were new ataraxics such as thiopropazate (Dartal) and trifluoperazine (Stelazine), which further broadened the treatment possibilities. Other valuable compounds by a large variety of pharmaceutical houses are now in test.

One of the major difficulties in determining which of the preparations developed are effective, and for what, is the lack of adequate equipment and trained personnel with which to carry out clinical testing. The major part of the requested \$4 million increase in funds for psychopharmacology is directed to improve this situation. In chemical synthesis it is usual to make not one, but a whole series of compounds of which only a few are ever tested adequately. Since a very minor difference in chemical structure may make one preparation useful and another inert, the best drug may be missed. It seems almost criminal to have a drug—or perhaps a dozen drugs—of possible usefulness gathering dust on a shelf simply because there are not adequate clinical facilities to determine its value. There is unanimous agreement by practically everyone concerned that expansion of critical clinical investigative facilities for drug evaluation is one of our very most pressing needs. The pharmaceutical industry, major producer of these new agents, is equipped for preliminary screening in animals but without clinical investigative facilities there can be no selection of effective drugs.

The facilities at Rockland State Hospital are as complete as any presently available but I am all too aware of their limitations in respect to both the number of compounds and the speed with which they can be tested. At the present time our limitations, as well as those of other places, are largely based on lack of funds for sufficient well trained personnel. As this committee knows mental hospitals in the United States are understaffed and overcrowded so that attendants, nurses, and doctors cannot simply be “assigned” from other parts of the hospital to concentrate on the evaluation of new pharmaceuticals. The lack of really adequate facilities for critical examination of new compounds leads at times to sloppy work which masquerades as clinical research.

What is involved in clinically evaluating a new drug? Let us take a simple case in which we wish to observe the effect on 10 to 20 male and 10 to 20 female patients. It is worth pointing out that with a new agent, careful examination of small numbers is usually more meaningful than superficial statistics on several hundred patients. To do this adequately requires reasonably continuous observation and recording by a nurse and two attendants plus a physician for each group since patients of different sexes are not kept on the same ward. Since there are 168 hours in a week, to have 2 attendants constantly present on a ward means the employment of at least 9 attendants and taking into account holidays, sick leave, and vacations 10 is a minimal realistic figure. The same is obviously true in respect to the nurses. Calculating the salary of attendants at roughly \$4,000 per year, that of nurses at \$5,000 and that of a physician at \$10,000 the total for observing one ward is \$75,000. If the observations are to be on both males and females, as they should be, the figure rises to \$150,000 and if both acute patients and chronic patients are to be included, as they should be, the total leaps to \$300,000. The addition of the necessary secretarial personnel, psychologists for testing, social workers for follow-up studies, laboratory technicians, plus necessary supplies and equipment again raises the figure.

In any one particular year a pharmaceutical house might not have compounds which justify evaluation in a particular area so that anticipated financial support for such a hospital or clinic research unit is understandably not forthcoming. This makes it very difficult to plan for doctors, nurses, lab technicians, etc. and requires a disproportionate amount of time trying to balance budgets and work out grant support. There is also an unavoidable temptation for the clinic or hospital to accept for testing compounds of relatively low potential, simply because the financial support is assured, since otherwise a loss of a trained research team would result.

If pharmaceutical houses had to carry the full cost of really adequate drug evaluations in humans there would be few new drugs. The cost of a single toxicity evaluation of a single drug in a single species (such as a dog) averages \$20,000. The cost of fully adequate human evaluation is beyond industry support. Even their most generous grants cannot begin to cover the actual cost of testing, so that it is both fitting and proper that the Congress provide the funds for the evaluation of medications and treatments which so vitally affect the general welfare and health of our Nation. Renewable 5-year program support of screening centers would provide skilled independent investigation of drugs in patients.

Through careful planning and by dint of certain economies, up to a dozen compounds could be simultaneously screened by a clinical evaluation team, but

this would require from a quarter to a half million dollars a year without anything that remotely resembles "frills". The establishment of four to six such research groups in State hospitals, clinics or universities would serve a three-fold function: (1) to evaluate extra dozens of potentially valuable compounds each year; (2) to develop techniques of drug evaluation which could be used in other places; (3) to provide a place for training the additional personnel so badly needed in this clinical research area. To this end, the amount of \$2 million is requested for the clinical screening centers, and additional funds (specified later) should be made available for fellowships and training grants, to be given specifically in the area of training such clinical research personnel. The identification of even one major compound (such as the phenothiazine derivatives, reserpine, or the psychic energizers) would repay this investment a thousandfold in strictly economic terms and the humanitarian benefits to be derived are immeasurable.

The pharmaceutical industry contributes toward this end, but the system suffers from certain drawbacks despite its success to date in producing preparations which have changed the face of medicine. Let us use an illustration: The company which produced iproniazid (Marsilid) now has available over 200 analogs which may be better than the original compound in the treatment of depression. To evaluate even one of these adequately and to collect the necessary data for approval by the Food and Drug Administration requires its evaluation at 10 to 20 different places. Grants-in-aid in the amount of \$10,000 at each of these, plus the administration and evaluation of the reports would amount to perhaps a quarter of a million dollars for information which is by no means as complete as would be desirable. To thus evaluate even the 10 most promising compounds would require a \$2,500,000 investment, and this is only for one type of a drug in one area of medicine for one company. The pharmaceutical industry spent \$170 million last year (and will spend close to \$200 million this year) for research of all kinds but this is only a small part of what the general welfare of our Nation requires in this field—particularly for basic research.

A recent study has shown that each new chemical entity marketed in 1958 by the pharmaceutical industry for prescription by physicians required the preparation and biological testing of approximately 60 compounds and that each of these had entailed the expenditure of \$6 million of combined industry overall research through a number of years. I point this out for two reasons: (1) to show how complex, costly, but rewarding research is, and (2) to illustrate that the drug houses are already extending themselves along these lines. Their contribution will undoubtedly increase, but it alone is insufficient.

The pharmaceutical industry also has much to offer in the training of research personnel. In certain areas of psychopharmacology it is more advanced than most regular teaching institutions. Experience in such techniques and procedures for men from universities and hospitals would be invaluable. It is strongly recommended that \$1 million for training be made available for the specific purpose of utilizing these facilities and those of the proposed clinical evaluation centers and other psychopharmacology training facilities. A number of the major pharmaceutical houses have expressed their interest in possibility conducting such training, provided that funds for the trainees are made available. At the present time the National Institutes of Health encourage such trainees for varying periods of time within their own intramural program and it is therefore warmly suggested that, in a similar manner, advantage be taken of the opportunity provided by the research institutes connected with many of the drug houses or in the drug houses themselves. A few of us are fortunate (as am I) to have on our research staffs men who have spent varying periods of time working in pharmaceutical concerns. Their knowledge and experience is invaluable not only in testing new compounds but in a variety of other ways.

Although there was an increase in psychopharmacology grant funds last year the National Institute of Mental Health has done an excellent job in administering this enlarged program. The indications are that with the present rate of growth at least \$7 million will be needed for the grant program in the coming year to meet essential commitments.

By way of comment rather than criticism it should be pointed out that the Psychopharmacology Service Center would seem to require a long-range policy in respect to the providing of information services. One of the most desperate needs of those of us working in the field is to know what is going on in this country and elsewhere. Without this information we may overlook valuable

leads as to both treatment and research as well as needlessly duplicating costly experiments. I would therefore most strongly suggest that a consistent and forceful policy be adopted in respect to providing maximum information as to what others are doing both here and abroad.

As the program in psychopharmacology as well as in other areas continues to expand, an appropriate (and marked) rise in civil service rating and salary for those participating in or administering such programs is beyond question a necessity. The two areas of the Federal Government with which I have had most extensive contact are the National Institute of Mental Health (and its Psychopharmacology Service Center) and the Food and Drug Administration. On a number of occasions I have expressed dismay at the disproportionate low salaries of personnel in the Food and Drug Administration as compared with certain other Government services. To my infinite regret I now learn that Dr. Albert Holland, Director of the Food and Drug Administration medical program, has felt it necessary to resign and there is little question in my mind that his difficulties in holding a staff because of salary limitations was a major factor. Attention should be paid to similar problems in the National Institutes lest the same sort of event become widespread. C. H. Greenewalt, president of du Pont points out in his book, "The Uncommon Man" (published last month) that the take-home pay of a top-rank Russian professor "is just about equivalent to my own compensation from the Du Pont Co." How can we expect to attract and hold any of our best brains and energies in research if we systematically and deliberately undervalue and underpay them? I would urge that the appropriate authorities in the Federal Government bring forward realistic recommendations that will not leave us hopelessly behind our Soviet counterparts.

In summary then, the stress in the field of psychopharmacology should be on basic research as exemplified by the \$7 million requested for the grant program. In the expenditure of these funds preference should definitely be given to non-profit institutions such as universities, State hospitals, etc., and grants to industrial concerns should be primarily for types of research that cannot be done as competently or rapidly elsewhere. The major unmet support at the present time is for centers capable of clinically evaluating new compounds for which \$2 million is requested. Another \$1 million is urged for establishing and supporting training programs at these and related institutions to augment our supply of clinical and basic investigators in the biological sciences.

It would be valuable to have available a review of the present status, needs, and opportunities not only in psychopharmacology but in the whole area of mental health and disease. Perhaps the NIMH could prepare a statement of the extent of its activities in such fields as psychiatry, psychology, biochemistry, pharmacology, physiology, sociology, genetics, etc., and the major problems (e.g. schizophrenia, mental deficiency, alcoholism, narcotic addiction, neuroses, psychosomatic disorders, etc.) with which it deals.

To meet the expanding need for research grants in all fields (including psychopharmacology) the total of \$30,600,000 appears necessary. The research fellowship program should be increased by \$1 million (to \$2,396,000) of which at least half should be for biological studies of human behavior to include all pertinent disciplines such as chemistry, genetics, morphology, physiology, etc. An overall increase in training of all types up to the amount of \$30 million a year is a realistic amount to meet our growing needs. This would enable research training to be extended down into the residency or medical school levels thereby introducing many more students to the needs and attractions of research. It would include provision for the healthy expansion of the general practitioner program which has been received so enthusiastically. An additional \$1 million is requested for the normal expansion of grants for clinics and other preventive services bringing the total to \$5 million.

With the opening of the clinical psychopharmacology center at St. Elizabeths Hospital the excellent intramural program of the NIMH is again brought to attention. An increase of \$1,079,000 (up to \$8 million) is requested for the adequate support of these programs which include the St. Elizabeths Hospital research, under the direction of one of the world's outstanding investigators in this field, Dr. Joel Elkes; the NIMH intramural program under Dr. Kety; the investigations at Lexington, and original and comprehensive statistical investigations of great general value under the direction of Dr. Morton Kramer. In order to carry out the increases in overall program an additional \$387,000 is needed for the review and approval which would include grant review activities as well as the formal study of the status of research referred to previously (bringing this total to \$1,250,000). Another \$270,000 is requested to bring to \$2 million the total for professional and technical assistance and under this

same item a further \$1 million should provide funds for State demonstrations of mental health activity to be used at the discretion of the State. This would differ from the title 5 and from the State grants-in-aid since it would be used for expenditure on some stimulating and educational projects which are not covered or authorized by present appropriations. Finally, the budget for administration should be raised to \$640,000.

A development which may be of interest to members of this committee is the opening of the Haiti Psychiatric Institute. The idea of establishing a psychiatric center in Haiti began many decades ago with Dr. Louis Mars, a Haitian psychiatrist who had received graduate training in psychiatry at the Menninger Clinic and at New York Psychiatric Institute. Because of the extreme economies which must be practiced by a country whose total national budget this year is \$21 million, the providing of adequate psychiatric care was deferred from year to year and from decade to decade. The "mental hospital" in Haiti consisted of a barrack abandoned by the U.S. Marines a quarter of a century ago and located far outside Port-au-Prince. It had fallen into a state of grotesque disrepair with great gaping holes in the tin roofs and some 20 or 30 beds available for a population of 250 patients. The total budget for drugs of all sorts amounted to less than \$20 a month. Part of my own astonishment arose from the fact that they were able to maintain the census at only 250 persons whereas in the United States, considering the size of the population, there would have been a hard core of at least 6,000 to 9,000 patients. The bookkeeping explanation was relatively simple since there were an average of 15 admissions a month, which was balanced by 5 discharges, 5 escapes, and 5 deaths. Because of the distance and because of other commitments Dr. Mars, the only psychiatrist in the country, was able to spend only an hour or two a week at the "hospital." Disturbed patients were placed in cells which had formerly been used for prisoners and the general level of care was frighteningly primitive.

After seeing this situation a little over a year ago, I was able to interest three of the major pharmaceutical houses. Hoffmann-La Roche, Schering Corp., and Wyeth, in providing funds to establish a new and experimental approach to the problem. The idea of this was that since other types of psychiatric care were not available, an effort would be made to treat the patients on an outpatient basis primarily with newly available psychopharmaceuticals. This approach was essential since the funds needed for multi-million-dollar hospital construction were simply not available. In addition to providing the funds for constructing the new setup, the companies mentioned above also agreed to furnish drugs free for a period of 2 years.

Dr. Francois Duvalier, the president, was a physician and was most sympathetic to the opportunity to improve the medical care of his countrymen. By his direction Dr. August Denizé, Minister of Health, worked out a plan with myself and Dr. Henry Brill, assistant commissioner for education and research of New York State. The Government of Haiti agreed to staff and maintain a Haitian Psychiatric Institute once it was built. Mr. John Heyman of my staff supervised the actual expenditure of funds and the building (which was done by a Haitian architect trained at Cornell), and Medico, under the presidency of Angier Biddle Duke, gave sponsorship to the enterprise. I hereby submit a number of photographs and plans of this institute which was opened only a few weeks ago. The photographs done by W. Eugene Smith, one of the outstanding photographers in the country, and a movie taken by Ericka Anderson, a co-winner of the Academy Award for her film on Schweitzer, are still in preparation, and I hope to be able to show them to you by next year. Incidentally, a large part of the cost of the film was defrayed by Dr. Paul Mellon.

We hope to be able to illustrate that a substantial part of the medical care of the mentally ill can be undertaken by means of relatively inexpensive clinics of this sort which would provide a model for other parts of the world where psychiatric facilities are extremely limited or totally absent. The nurses and doctors were given a minimal 6-month training course at the Rockland State Hospital, and one of our staff who is French speaking is now in Haiti for a few months under a grant from the NIMH.

We feel that this illustration of the contribution of private industry and private individuals sets a model which demonstrates the disposition of men of good will everywhere to help one another. The Government of Pakistan has requested us to determine whether such a clinic would be feasible there and Pfizer International is providing funds to carry out this investigation.

As our capital of knowledge about one or another disease increases we are able to turn our attention to other and equally important areas of concern.

We are only now beginning to fully explore the social applications of the research advances of the past 5 years and it will surely be another decade before full advantage will be taken of the introduction of the new group of psychopharmaceuticals including the antidepressants. Those of us in the vanguard—the researchers, the research installations, and the congressional committees supporting these new advances—must begin to turn our attention to the problems ahead.

As medical progress makes possible the lengthening of life, increasing attention must be paid to the diseases of aging and there is probably none more important than cerebral arteriosclerosis. The admission rate to mental hospitals in New York State has risen from 10 percent a quarter of a century ago to an estimated 30 percent at the present time. This constitutes but a bare index of the magnitude of the problem since there are quite literally millions of our population who suffer from some degree of arteriosclerosis which is severe enough to seriously interfere with mental and emotional functioning but has not yet reached the stage where institutionalization is required. The fact that almost everyone past 40 suffers to some extent from this condition has been recognized by a few authorities. Because we presently have no adequate methods of treatment should under no circumstances lead us to neglect or underestimate the magnitude of the problem.

In the normal course of events, responsibility in almost any occupation increases with age and experience, but so does arteriosclerosis. The Congress of the United States is not typical, because the senior citizens of this body are remarkably alert, emotionally stable, and free of the more serious consequence of hardening of the arteries of the brain, if they were not in this excellent condition it is highly dubious if they could manage to be reelected to office. They are therefore a screened and select group. In many other fields such as industry or the academic world this is not always the case and consequently at times important and crucial decisions are made by individuals who should be qualified because of age and experience but whose judgment is defective due to cerebral arteriosclerosis.

The paucity of research in this area is frightening and the reason usually given is that there is so little that can be done. Rather than repelling us, our lack of knowledge ought to act as a stimulus: it was ignorance and the recognition and acknowledgment of ignorance that led to the development of the antibiotic, polio vaccines, pharmaceutical treatment for schizophrenia and for depression, and it is out of this same magnificent recognition of ignorance that adequate treatment for cerebral arteriosclerosis will come. In our own way in our own research unit at Rockland State Hospital we have begun some pilot investigations into possible treatment for cerebral arteriosclerosis. In terms of the magnitude of the problem the numbers of research projects is sorely limited and we have hardly begun to face the issue. We are under strong obligation to the citizens of the United States who have entrusted us with the responsibility to attack the problem of cerebral arteriosclerosis as we have done so successfully with other diseases.

The knowledge on which this advance rests comes from the researchers, the pharmaceutical houses, and significantly from congressional appropriations. It is to further work of this sort which provides life, health, and efficiency for ourselves and others that the present budget for the National Institute of Mental Health is requested.

	Appropriation, 1959	Citizens request, 1960
Grants:		
Research grants.....	\$18,834,000	\$30,600,000
Psychopharmacology.....	¹ 6,000,000	¹ 10,000,000
Research fellowships.....	1,396,000	2,396,000
Training.....	18,213,000	30,000,000
Grants for clinics and other preventive services.....	4,000,000	5,000,000
Direct operations:		
Research.....	6,921,000	8,000,000
Review and approval.....	863,000	1,250,000
Training activities.....	100,000	100,000
Professional and technical assistance.....	1,730,000	2,000,000
Administration.....	362,000	640,000
Total.....	52,419,000	79,986,000

¹ These are subdivisions of the research grant. The \$10,000,000 for psychopharmacology includes \$7,000,000 for basic research grants, \$2,000,000 for clinical screening centers, and \$1,000,000 for training programs in basic and clinical psychopharmacology.

INCREASE REQUESTED

Senator HILL. Mr. Gorman, you are asking for an increase of some \$19,500,000, approximately, over the amount carried in the bill as it passed the House; is that correct, sir?

Mr. GORMAN. Yes, Mr. Chairman.

Senator HILL. That would make, then, an increase over the budget estimate of about approximately \$27½ million.

Mr. GORMAN. That is correct, sir.

Senator HILL. Senator Smith?

I guess it is a compliment to the witnesses that there are no questions. The witnesses have covered the case so well.

Senator SMITH. These witnesses always do. It is very refreshing to have them come in here.

FUNDS NEEDED FOR TRAINING

I was looking at this training item. It sounds to me as though Mr. Gorman and Mr. Flemming agree in the training item. I wonder where the disagreement comes.

Mr. GORMAN. Money. I agree with the Secretary's words. I think they are very fine. I just wish he would put money where the words are. We desperately need money for these stipends and the training programs. Just like the general practitioner program, everybody is in favor of it, but unless you have the money, you cannot pay the stipends to the people in the District of Columbia, who are giving up their practices right now, right at this moment. I talked to one practitioner who has three children, has been in general practice for a number of years, and gave up her practice and wanted to go into psychiatry. Today she is not assured that she will start on July 1, because the money is not available.

The Secretary has recommended no increase over last year's money for stipends in the general practitioner area.

Senator SMITH. That is what I was going to ask, Mr. Chairman. I was sorry not to be here the day the Secretary was in, and I wondered if the record would include his recommendation for the 1960 budget on these items.

Senator HILL. I think it is fair to say that his recommendations were that we reject the increases made by the House and accept the budget estimates. I think the record will confirm that.

Senator SMITH. And did the record include his recommendation to the budget?

Senator HILL. We have that over here. In other words, we have the figures that he requested from the budget, and then, of course, we have the figures as to the budget estimates; that is, the amounts that the budget allowed.

Senator SMITH. It is always interesting to follow through on these recommendations and where they are cut.

Senator HILL. And how the requests are lost in the processes of going through the budget.

Mr. GORMAN. I just was thinking that the money was lost somewhere. But it did not come out, finally.

Senator HILL. Well, what you are asking us to do is to find the money and put the money back in the bill.

FUNDS ACTUALLY ANTI-INFLATIONARY

Mr. GORMAN. From the point of view of economy and of balancing this budget, this is an anti-inflationary measure—600,000 mental patients are not productive. They are tax recipients, not taxpayers. Two million people who go to clinics and other psychiatric agencies are mostly tax recipients. It is an enormous load. The States in many cases have had to borrow through bond issues to pay for construction of mental hospitals. It still runs about \$100 million a year for construction at the State level. The States are doing all they can. They are doing a magnificent job. They are just really breaking their backs on this problem. But I think in supporting them, if we can only give them the research and the training—that is, the knowledge and the people to apply it—we will break the back of this thing.

I think the very fact that we have 52,000 less patients in our mental hospitals today than we would have had without the advent of the new drugs and research is the most hopeful sign in this field that I have ever seen. I have only been in it for 15 years; but I am totally optimistic, Mr. Chairman, that if we will invest the money in research, in people like Dr. Kline, and in training, we can make the large mental hospitals obsolete. I do honestly believe we can make them obsolete and save this country an enormous amount of money. And that should please Mr. Flemming and, surely, the actuaries of the Bureau of the Budget.

Dr. KLINE. If I might add, being a little more practical than Mr. Gorman—

Mr. GORMAN. These psychiatrists are very impractical, Mr. Chairman. I yield to Dr. Kline.

Dr. KLINE. In terms of the financial part, I think you have to take into consideration that 52,000 less than the anticipated number of patients is not only times the \$1,500 a year which it would have cost to support each of them, but there is also the factor that beds have to be constructed. The hospital where I am has been rated roughly 69 percent overcrowded, which is a fantastic situation. So that if these extra beds had to be built—they now average something like \$15,000 apiece per bed, including maintenance and so on—so that you have to multiply not only \$1,500 a year, but the \$1,500 times the \$15,000 per bed. No matter how you add it up, the program has actually more than paid for itself already. And it certainly is an area where a great deal more can be done, and I would advocate it, not only on humanitarian grounds, but on strictly budgetary grounds, as Mr. Gorman has done—that this is one of the most direct economies that can be made. The little that we have invested has already paid off tremendously, and I think it verges on criminal neglect not to push while we have the advantage.

INCREASING BED COSTS

Senator SMITH. Mr. Chairman, the doctor is very conservative in his figures. Last week, before one of the committees, testimony came in that beds were costing from \$12,000 to \$44,000, and the best average they could come up with is \$19,500 per bed. So at \$15,000, you are very conservative, Doctor.

Mr. GORMAN. That only proves that I am more practical than Dr. Kline. I know the beds cost \$20,000 at a minimum. And I am much more practical than he is.

Senator HILL. Doctor, you speak about the terribly overcrowded situation in your own hospital. Would not this situation prevail in most of the mental hospitals today?

OVERCROWDING

Dr. KLINE. Virtually every hospital in the United States is overcrowded by the minimum criteria set up by the American Psychiatric Association. I think only something like 1 percent of the hospitals in the country qualify. Even in New York State we are not the most overcrowded of the New York State institutions. The situation is desperate. And if it had not been for the advent of the newer treatments, I do not know where we would have been in the past 5 years. And certainly, further work must be done, because as our population grows, the problem proportionately increases. So you are quite correct, sir, that in every State, hospitals are overcrowded, many of them much worse than in New York State.

Senator HILL. And of course without medical research you would not have these newer treatments.

Dr. KLINE. No. And I do not think there is an industry that could survive that did not invest at least 5 to 10 percent of its total resources in research. And we are trying to get along in this country on a fraction of a fraction of that. The only hope I can see of reducing the mental hospital burden is through research. And our ultimate aim—and I do not think it is an unrealistic one, and I do not think it is one for the “pie in the sky by and by” category—is that within the foreseeable future we should be able to develop methods of treatment that will keep patients out of mental hospitals, that will keep them productive, which is certainly better for their families, for themselves, and for the welfare of our Nation in general.

PREVENTING INSTITUTIONALIZING PATIENTS

Senator HILL. In other words, what you want to do is to prevent this compulsion of having to admit so many patients to these mental hospitals.

Dr. KLINE. That is very correct, sir. And even as we are now beginning to get a start against schizophrenia, the specter of arteriosclerosis is mounting—an increase from 10 percent of our admissions to 30 percent. And as we are able to prolong life—I think it was the Hoover Commission that pointed out that there is little point in prolonging life if it is to end in ignominious institutionalization. So that it is not only against one problem that we have to deal, but many; and particularly, at this moment, if we could only continue the work with schizophrenia and start some work to deal with this mounting problem of cerebral arteriosclerosis, it would be well.

Mr. GORMAN. If I could end on this one final note: I do not think we express sufficiently our gratitude to the Congress. We take for granted the establishment of the National Institute of Mental Health. But I remember in 1945 when I toured my first mental hospital as a

newspaper reporter there was no National Institute of Mental Health. There was practically nothing in the way of research training, training of psychiatrists, psychologists, or any such programs. I remember talking at that time to the distinguished Governor of Oklahoma, and I said, "Governor, you are going to bankrupt this State by building more and more of these mental hospitals."

The change that I have seen, Mr. Chairman and Senator Smith, in the 15 years, is a total reversal of the picture. We now have medications and young people coming into this field. I go into mental institutions now. I see many people being treated. In 1945, the beds were just stacked up. The patients could not get down from the beds to walk out. They had to climb over the front of the bed. There was no room. It was something out of Dante's Inferno. And I toured 170 of those hospitals in 5 years. And I tell you today that the change is enormous. I do feel, Mr. Chairman, that there ought to be on the record a statement of our sincere gratitude to the Congress for spearheading these research and training programs, which provide honestly the only answer to this massive health problem.

Senator SMITH. Mr. Chairman, may I say a word here? Mr. Gorman, thank you very much for those words. If it had not been for the chairman of this committee, Senator Hill, we still would be waiting for action. And I mean that most sincerely. He has pioneered in this field, with the help of people like yourselves. And people are just beginning to find out about it.

Senator HILL. Senator Smith is most generous. But I want to say, as I said on the floor of the U.S. Senate last week: It was not any one Member of the Senate or of the Congress. It has been a team. And there has been no one on this team who has been more devoted or dedicated or who played more brilliantly than the distinguished Senator from Maine, Senator Smith. You can attest to that.

Mr. GORMAN. I can attest to that. I can just say the Senator from Maine is very modest. Without her enormous help we would be nowhere.

Senator HILL. Gentlemen, as Senator Smith said earlier, you always bring us excellent presentations. You have certainly done so today, and we are most grateful to you. Remember that we cannot do anything unless and except as you gentlemen bring us the ammunition, bring us the tools, with which to try to do the job. Is that not right, Senator?

You bring us the weapons and the tools and the ammunition. We are deeply grateful to you.

Thank you very much.

PREPARED STATEMENT

Senator HILL. Mr. Roger W. Russell, executive secretary of the American Psychological Association, has requested that his statement be made a part of the record of the hearings on the budget for the National Institute of Mental Health. Mr. Russell's statement will appear at this point.

(The statement referred to follows:)

STATEMENT OF ROGER W. RUSSELL, EXECUTIVE SECRETARY, AMERICAN
PSYCHOLOGICAL ASSOCIATION

INTRODUCTION

Mr. Chairman and members, the American Psychological Association very much appreciates the opportunity to submit testimony relating to appropriations for the Federal Government's efforts to solve the problems of mental health. These are problems, so important to human welfare and our Nation's development, to which you have already given much careful thought and strong support. They are problems with which psychologists, because of their training, research, and experience, have long been concerned. Psychology is contributing more and more of its manpower, its knowledge and skills, and its capabilities to Federal, State, and private efforts in the field of mental health. Psychologists are participating with colleagues from other disciplines in the National Institute of Mental Health program.

We believe the Congress has given considered responsibility, authority, and financial support to NIMH; we wish to record our confidence in the program and to recommend that it continue to receive the support it needs.

As citizens with certain special competences in the mental health field, psychologists wish to join with their colleagues in providing information which may be useful to you in making your decisions. The American Psychological Association, with headquarters in Washington at 1333 16th Street NW., is the national scientific organization of American psychologists; at present it has approximately 18,000 members. Today, there is lack of sure and comprehensive knowledge of methods for preventing and treating mental illness. Psychologists, in collaboration with their colleagues in related disciplines, are constantly searching for new information on human behavior which may help in the maintenance of mental health and in the return of those who are ill to productive activities. They are engaged in the further development of procedures and techniques which appear promising. And psychologists are also playing a major role in applying techniques already available.

When the Nation recognizes an important problem, actions typically proceed through three general phases: research, development, and application.

Research seeks to define problems more precisely, to study their various facets in detail, and to discover ways of solving them.

Potentially useful solutions then undergo *development* until they are in a form which can be of practical use.

General *application* follows, but usually under careful observation and evaluation.

These steps are clearly illustrated in the Nation's efforts toward solving the problems of poliomyelitis. The strategy of such an attack required the wise and skillful timing of support for research, development, and application. Today we must still evaluate how polio vaccine is working out in daily practice.

In the Nation's overall attack on the general problems of mental health, all these phases must be supported. As the results of research become available, development and application will become more prominent. When, however, such a complex problem is new, it is understandable that emphasis must be placed on the research phase. This overall strategy must also take into consideration the need for properly trained *manpower* to implement each phase. This statement is concerned with the three phases and with the crucial need for manpower.

RESEARCH

Discovery of means of treating mental illness and, more important, of maintaining mental health depends upon a thorough understanding of man and of his behavior.

Man is the most complex of all biological systems. Thousands of biochemical events, occurring in hundreds of organs and tissues, are necessary just to keep him alive. He is also capable of responding to his physical and social environment in an astonishingly wide variety of ways; and, to complicate the situation further, he is capable of altering his own responses through learning and other

psychological processes. During the last 100 years, and particularly since the beginning of this century, the methods of science have been applied to the search for a clearer understanding of man's complex behavior.

The NIMH program recognizes the important contributions which many basic scientific disciplines can make in the field of mental health and therefore supports many different kinds of research, performed by several kinds of scientists. We feel that this broadly placed support of research is the only wise policy, if the Institute is to continue its mission successfully. It should be noted that relevant discoveries may come from fields not ordinarily classed in the area of mental health. For example, there is evidence that shifting populations and economic classes increase stress and emotional disturbance. It may be that a sociologist studying mobility of populations will find a pattern of importance and throw new light on how human behavior is influenced.

We interpret developments in the Institute's research grants program during the past few years as indicating that expansion beyond its present normal growth will be necessary to meet the needs of the new and sound research proposals now being submitted. We respectfully suggest that expansion of the grants program deserves special attention at this time.

In our opinion research funds should be free to follow research opportunity. The history of scientific and technological development has shown that it is impossible to predict, far in advance, just where specific scientific breakthroughs may come. The chances of achieving significant breakthroughs are greatly increased by broad support of basic scientific investigations. We believe Congress has shown great wisdom in following this general approach of encouraging research on a wide front and of following up new areas of particular promise with special support. However, sound research administration requires flexibility.

Research planners should not be narrowly instructed as to where to place their resources; they should be given a good deal of freedom to shift their resources as the continuing results of research dictate.

For example, when NIMH was organized, the available methods for treatment of mental illness emphasized psychotherapy, shock therapy, and psychosurgery. But within a brief 10 years, the use of shock therapy has decreased, and certain psychosurgical techniques have nearly faded from the scene. The new techniques of psychopharmacology, barely above the horizon 10 years ago, have shown such promise that they have been singled out for special support and development. Tomorrow other new opportunities will present themselves, as is indicated by the diversity of approach in the NIMH research grants. We would like to mention some of the research areas supported by NIMH in which psychologists have a special interest.

For several years NIMH has been supporting researches on the relationship between behavioral characteristics and physiological events in the nervous system; it has been found that certain relationships are as individual and personal as are fingerprints. Other researches have studied these relationships by mapping areas of the brain involved in certain kinds of behavioral responses.

NIMH grantees are working on better methods for evaluating treatment: it is important to research on new methods of treatment to have good guidelines with which to determine whether a patient is actually making progress.

Schizophrenia accounts for more than half of the patients in mental hospitals. As a result of NIMH support, new clues are now being found to the psychological, biological, and biochemical processes which help explain this abnormal pattern of behavior.

Relationships between bodily events and behavior can be modified by chemical agents. The psychopharmacological program of NIMH is active in the search for drugs which can alleviate abnormal emotional behavior. A great deal of research is still needed on these psychoactive drugs to determine what they do, how they do it, what side effects they may produce, and how permanent their desirable effects are.

Medical science now makes it possible for relatively greater numbers of people to grow to an advanced age; but, as this committee knows, this happy fact nonetheless raises problems. NIMH has underway a program which is already providing information on the basic processes of aging and on the adjustment of the aged to society.

Formerly it was believed that narcotics addiction and alcoholism were entirely a matter of a physical hunger in the body of the addict; more recent studies are bringing to light the psychological factors that are involved.

New methods for the care and treatment of the mentally retarded have greatly changed our attitude toward them: many who were formerly considered to be poorly equipped for useful work can now be taught to support themselves and to live more satisfactorily as members of society. In instances of retardation due to metabolic dysfunction, there are on the research horizon some clues to the biochemistry of certain of these afflictions; the progress already made strongly indicates that further discoveries will be forthcoming.

The research areas just listed are but examples of the wide range of research supported by NIMH—details of the research projects are given in the NIMH annual reports. The program enjoys an excellent reputation among scientists and among administrators of research laboratories. In our opinion, this reputation is encouraging leaders in the national scientific community to develop interests in the field of mental health and is resulting in a movement of outstanding research persons into the field. We believe that the NIMH procedure for reviewing research proposals is also raising the general level of research in mental health and thereby attracting support from sources other than the Federal Government. It may well be that the availability of Federal funds on a matching basis would encourage still further the support of mental health research by State governments.

We would like to emphasize what the history of science has shown over and over again: the importance of systematic basic research. The past shows us that through basic research we solve scientific problems important to human welfare. The alternative is to search for such solutions on an ad hoc basis, trying this and that approach by guess and by chance. The number of such guesses can be tremendous—for example, it is frightening to contemplate the number of chemical agents available today and synthesizable in the future which might be tried out for the treatment of mental illness. It is our firm conviction that basic research can provide an understanding of the biological and behavioral systems in man which are involved in his adjustment to the physical and social environments. Means of maintaining mental health and of treating mental illness can then be based upon this systematic knowledge.

DEVELOPMENT

Promising solutions to problems of mental health usually require a period of development before they are considered suitable for application. The importance of developmental work was specifically recognized in the 1958 congressional committee reports. The concern of NIMH in this phase of the overall attack on mental health problems is well illustrated in the activities of its Psychopharmacology Service Center. When a chemical agent is discovered which may have an effect upon the behavior of living organisms, it must undergo a series of examinations to determine its specific effects upon behavior; the possibility that it may produce complicating side effects; its effective doses, route of administration, etc.; and its effectiveness in the treatment of various types of behavior abnormalities. These examinations typically proceed through stages of preclinical testing on animal subjects, preliminary tests with human patients, and eventually human clinical trials on a more extensive scale.

Special techniques are necessary for evaluation at each of these stages. PSC is concerned that many of these techniques have not been standardized; therefore, it is presently devoting considerable attention to the support of research which will lead to adequate methods. Predictor measures are needed which will indicate who will benefit from what therapy. Criterion measures are also needed by which we can decide with confidence that behavior abnormalities have or have not improved under any particular treatment. While this process of improving techniques is in progress, PSC is supporting evaluation studies at both preclinical and clinical stages, using the best methods now available.

There are special manpower problems which may arise during the developmental stages. Many organizations, public and private, are participating and contributing to the development of mental health techniques. These agencies must necessarily compete for the limited supply of skilled manpower. The resulting manpower problem is illustrated in a recent statement by the board of directors of the Pharmaceutical Manufacturers Association:

"It must be recognized that there are only three ways by which a pharmaceutical firm can staff a Government-subsidized project. The first is to divert its own scientists from projects on which they are already working. The second

is to obtain additional personnel from other firms, which results in a wasteful pattern of raiding. The third—easiest but most destructive—is to obtain the needed people from academic life, thus depleting still further the supply of teachers and scientists engaged in basis research.”

Actions taken to accelerate development must also take into consideration the consequent effects upon the manpower pool.

APPLICATION

The ultimate goal of research and development is improved human welfare. This requires the effective application of new knowledge and skills. Application involves the services of competent practitioners who must be constantly informed of new developments. This is a serious problem today in all fields of science. Our newspapers inform us daily of just how critical delays of even a few months may be to our national defense. “Leadtime” has become a familiar concept as the term is applied in military and industrial settings. This concept applies also to the application of results derived from research in the field of mental health. In order to make new techniques available as rapidly as possible, NIMH provides professional and technical assistance in several forms, including demonstrations, short courses, and special conferences. The Institute supports, in various ways, publication of new information and is alert to new methods of presenting, storing, and retrieving the rapidly increasing quantity of information.

The NIMH title V program provides grants for demonstrating and evaluating the application of improved methods for the care, treatment, and rehabilitation of patients in State mental hospitals. These demonstrations are a form of applied research. They provide opportunities to observe the problems which arise in putting improved methods to work. A related aspect of the present NIMH program is the funds given to States for developing and expanding their mental health programs. These grants, given to State mental health authorities, allow the establishment of new types of services and the incorporation of new ideas and information in ongoing programs, supported by State funds.

MANPOWER NEEDS

Progress in the attack on mental health problems depends upon talent, and upon the training of that talent. Our most valuable resources are the abilities of those who seek solutions and those who apply them: our scientists, our practitioners, our technicians.

NIMH has recognized the limitations placed upon our progress by the present scarcities in skilled manpower; a variety of programs has been initiated to overcome present deficiencies. NIMH is particularly to be commended for its training programs which have done much to provide leadership in this crucial area.

During the past few years, obvious needs have led to a concentration upon the training of clinical personnel, those who have the skills to apply methods already available.

We believe that these needs have not been fully met; therefore, the NIMH clinical training programs must be continued.

Since the clinical materials with which the mental health practitioner is concerned emphasize human behavior, behavioral scientists can contribute to clinical training. But full advantage has not been taken of the knowledge and skills of such specialists, either in actual clinical practice or in the training of clinicians. We believe that much might be gained from teaching principles of human behavior to medical students and from using behavioral scientists to augment present programs of psychiatric training.

With clinical training programs well underway, it is also essential that NIMH be enabled to turn more attention to training for research. It has been difficult to find a sufficient number of properly skilled persons even to implement research programs already funded. A number of the Nation's outstanding educational institutions have indicated their strong interest in developing the teaching staffs and facilities required to meet this regrettable mental health shortage. Some beginning has been made to expand research training programs; some pilot programs have been supported.

We believe that now is the time to implement fully NIMH plans for farsighted research training programs.

There is need for real support of research training in what are often referred to as the four “core professions” of the mental health field: Psychiatry, psychology,

social work, and nursing. We understand that NIMH already has proposals for such training programs in hand; yet only a small proportion of these proposals can be supported with present funds.

The research potential of other professions needs to be fostered.

It is probable that training in the "core professions" will not provide sufficient numbers of persons or sufficiently diversified skills. Even the few pilot programs now underway have already demonstrated how successfully basic sciences, such as physiology, biochemistry, pharmacology, and neurology, can collaborate with psychiatry and psychology in producing research personnel. We need to train more young men who are capable of, and interested in, working in research teams composed of many different kinds of scientists. Since these problems affect man as a member of society, as well as an individual, it is important to consider contributions which behavioral as well as biological scientists can make. Knowledge and skills in the behavioral sciences have been developing rapidly. Research training programs are needed which would prepare these scientists for work on problems of mental health and which would give biological scientists additional training in the behavioral sciences.

CONCLUSIONS

Psychologists observe that the Institute's requests for funds are based upon experience with the continuing growth of sound research and training programs. As citizens, the members of the American Psychological Association are concerned that taxpayers' moneys will be spent wisely. We believe that NIMH expenditures in the past have greatly improved the quality of research and training in mental health. Our recommendations—*italicized*—do not imply that NIMH planners have neglected obvious needs; it is rather that we wish to express our confidence in their program and to support their own recommendations.

PREPARED STATEMENT

Senator HILL. Dr. Louis S. Goodman, of the University of Utah, had requested to be heard, but was unable to be here today. His statement regarding the National Institutes of Health will appear at this point in the record.

(The statement referred to follows:)

STATEMENT OF LOUIS S. GOODMAN, M.A., M.D., AND LOUIS C. LASAGNA, M.D.

(Representing themselves and the American Society for Pharmacology and Experimental Therapeutics)

I am Dr. Louis Goodman, professor of pharmacology at the University of Utah College of Medicine. I have been in close contact with the growing field of psychopharmacology and with the program of the Psychopharmacology Service Center of the National Institute of Mental Health. My primary area of research interest for the last 20 years has been the study of the effects of drugs on the nervous system. I am president-elect of the American Society for Pharmacology and Experimental Therapeutics, a past member of the National Advisory Council on Neurological Diseases and Blindness, current Chairman of the Pharmacology Training Committee, Division of General Medical Sciences, the National Institutes of Health, and current Chairman of the Advisory Committee on Psychopharmacology, National Institute of Mental Health. Because my own research has been primarily in the experimental laboratory, I have asked Dr. Louis Lasagna, Johns Hopkins University School of Medicine, to accompany me here today. He has collaborated with me in the preparation of my testimony. In addition, both of us have been officially designated to present to you, as uninstructed delegates, the generally accepted views of the American Society for Pharmacology and Experimental Therapeutics, as expressed by its officers and its council.

Dr. Lasagna is a distinguished pharmacologist who specializes in the area of experimental therapeutics, that is, the study of efficacy of drugs in man. He is currently a member of the Psychopharmacology Review Committee, National Institute of Mental Health, and of the clinical panel, National Cancer Chemotherapy Service Center. His own research on the effects of drugs on mood and

behavior in both patients and normal subjects preceded by several years the advent of the tranquilizing drugs. He has worked with sedatives, stimulants, and opiates, as well as with tranquilizers and antidepressants.

The evidence in support of our qualifications is summarized in the biographical data attached to the letter written to this committee last February, respectfully requesting this opportunity to appear before you.

We have come here today to stress five major points, as follows: (1) The pivotal position of basic research for future progress in psychopharmacology and the absolute necessity for adequate, long-range, and unrestricted financial support for the individual research worker; (2) the critical nature of the acute shortage of psychopharmacologists in the United States today, and the equally acute shortage of neuropharmacologists and clinical pharmacologists; (3) the relation of the granting and contract functions of the Psychopharmacology Service Center to the pharmaceutical industry; (4) the need for more flexibility in determination of salaries for research administrators; and (5) the general lessons to be learned from my recent visit to a large number of medical research institutes in the Soviet Union.

On the basis of these major points, Dr. Lasagna and I have some specific budgetary recommendations for your consideration.

(1) *Basic research is pivotal for future progress in psychopharmacology.*—Dr. Lasagna and I do not have a “hard sell” in convincing a committee of your composition and caliber and experience that basic research in psychopharmacology is fundamental to real progress in the field of drug therapy of mental illness, our Nation’s leading public health problem. The pivotal position of basic research in all areas of the medical sciences is forcefully set forth in the so-called Bayne-Jones report, and every informed person has by now carefully read this masterly analysis and seriously reflected on its implications.

Despite the empirical therapeutic breakthrough achieved in the mid-1950’s with the introduction of chlorpromazine and reserpine, the surface of the major problem in psychopharmacology has barely been disturbed. Very much more remains to be accomplished. Extensive laboratory and clinical studies of current and novel drugs, combined with parallel advances in animal behavioral psychology and experimental psychiatry, will slowly yield a better understanding of the intimate mechanisms of action of psychotropic chemicals, methods for their assay in experimental animals and in normal and mentally ill patients, fundamental knowledge concerning mental disease itself, and the means of designing new and better therapeutic agents and procedures.

Drugs are available today which did not exist 5 years ago. They are taken for granted both by the physician and his patients. They do not cure mental illness but they do ameliorate or improve the secondary manifestations of the basic psychopathological disorders. It would be rash to predict whether truly curative or preventive drugs will ever be found, but certainly more effective, more selective, and less toxic agents will be forthcoming. The horizons are unlimited if more basic research is devoted to the three B’s: Brain, biochemistry, and behavior. Every conceivable level of biological organization and disorganization is being investigated. The number of approaches is truly legion, and fortunately the scientist in the United States is free to select his field of endeavor in conformity with his skills, his prejudices, and his educated guesses.

At the request of Dr. Pearce Bailey, Director, National Institute of Neurological Diseases and Blindness, a multifaceted report on the status of the neurological sciences has been prepared for the Congress by 30 scientists. In that document, which some of you may have occasion to read, I wrote the section on the status and future of neuropharmacology and psychopharmacology. Many of the research methods currently employed in psychopharmacology are described therein, as follows (in random order): Electrical signs of rewarding or aversive conditioned reflexes and the effects of drugs thereon; a variety of tests for learning, perception, discrimination, and memory in animals and man; pleasurable or rewarding self-stimulation in animals via electrodes deeply implanted in the brain; Skinnerian operant behavior techniques in man as well as in animals; drug-enzyme interactions and drug-transmitter relations, with particular attention to brain content of norepinephrine, 5-hydroxytryptamine, and mono-amine oxidase; effects of drugs on behavior in many lower forms of animals (including Siamese fighting fish); analysis of functions of the limbic (visceral) brain, reticular activating system, and diffuse thalamic projection system with respect to drug effects on emotions, aggressiveness, placidity, consciousness, and sleep; social hierarchies in animal colonies (monkeys, dogs, birds) and their modifica-

tion by chemicals; psychological rating scales for assessment of drug effects in normal individuals and psychiatric patients; use of psychotomimetic agents (hallucinogens) to induce "model" psychoses in normal and psychiatric patients, and the effects of tranquilizers on such psychoses; corticovisceral conditioning procedures which aid in the analysis of the role of emotions in the genesis of peptic ulcer, asthma, hypertension, and other syndromes with psychosomatic overtones; and tests for addiction liability and for "behavioral toxicity," that is, adverse effects on judgment, learning, perception, memory, and skilled psychomotor performance.

More important, my report proceeds to enumerate suggested areas for new or expanded research in psychopharmacology. Some 16 different areas are described. Of these, I would like to comment on only four, at this time. One area concerns research on sleep, a somewhat neglected field. Although research on sedatives and anesthetics is abundant enough, and despite the work of the Magoun and the Hess schools on the neuroanatomical and electrophysiological correlates of sleep, very little research has been done on the neurobiochemical changes underlying sleep and how sleep requirements can be manipulated by drugs, metabolites, or other agents. One should reflect on the manifold propaganda, practical, and heuristic consequences of a discovery which would permit man to sleep only 4 hours instead of 7 or 8 hours and still remain perfectly normal and healthy. It is reported that Soviet scientists are working toward this goal.

Another area of profitable research is that of the long-range chronic effects as opposed to the acute effects of drugs on the central nervous system and the mind. For this purpose, ingenious devices will be necessary so that methods can be used which do not interrupt or disturb the normal behavioral, physiological, and neurological functions of the experimental animals. Indwelling catheters, microstrain gages, deeply implanted electrodes, "monkey chairs," magnetic capsules, and similar machinery will prove useful and other apparatus will have to be invented. The objective is to study the effects of drugs on the "behaving animal" in ways which produce least disruption of the very behavior which we want to observe. Also the effects of drugs in relatively normal animals in more natural settings should be studied. The usual experimental animal living in a laboratory cage, with its monotony, isolation, and deprivation, is at best a highly disorganized creature.

Still another area of research concerns the "social" setting of animals for psychopharmacologic studies. In the U.S.S.R., there exists in Sukhumi (on the Black Sea coast) a unique, expensive, anthropoid station housing over 1,000 monkeys of many different species living in natural settings and on which a variety of physiological and behavioral studies are being conducted. I recently visited the Sukhumi institute and was much impressed by the research program and by its director, Prof. I. A. Utkin. Professor Utkin is anxious to visit the United States to lecture on his investigations, and I have asked the PSC staff to arrange, if possible, for this visit. Experts in the United States should be asked to consider whether such a station as exists in Sukhumi should be developed here. The NIMH should explore this matter further.

Yet another research area is that of investigation on corticovisceral conditioning, interoception, and the effects of drugs on experimentally induced emotional conflicts which result in visceral disease (peptic ulcer, hypertension, asthma, etc.). Soviet scientists have been active in this area for three decades, but until recently few workers in the United States have paid much attention to it. Indeed, I have recommended to the staff of the PSC that we send an expert team of animal behavioral psychologists and experimental psychiatrists to the U.S.S.R. to survey Soviet research in psychobiology.

These four brief examples and comments are intended to give some notion of the scope and content of the basic research opportunities in psychopharmacology. The competent staff of the PSC is thoroughly aware of these opportunities and is doing a good job in stimulating and fostering such research. However, research is done by people, and this brings us to the second of the five major points which Dr. Lasagna and I wish to stress, namely, the critical shortage of basic research workers in the field of psychopharmacology.

(2) *Critical shortage of psychopharmacologists, neuropharmacologists, and clinical pharmacologists.*—In the United States today, there is a critical shortage of psychopharmacologists and neuropharmacologists. Such a shortage does not exist in the U.S.S.R. For example, Prof. P. S. Kupalov, Pavlov's, oldest living pupil and inheritor of the "tower of silence" laboratory, Institute of Experi-

mental Medicine, told me in Leningrad last December that he is no longer training postdoctoral candidates in Pavlovian behavioral technics because there are now plenty of such individuals to meet the current needs of the many experimental laboratories in the Soviet Union.

Numerous positions currently budgeted for these basic research scientists in our medical schools, pharmaceutical laboratories, and governmental and private research institutes cannot be filled because trained persons are not available in the areas indicated. Basic research, fundamental to all progress, is done by people, not by machines, or by edicts, or by paper programs. The people who do basic research have ideas, imagination, curiosity. They are often unorthodox in their approach, a creative type of unorthodoxy which should be tolerated, even encouraged. They require expensive equipment, adequate technical help, sufficient laboratory space, and ample leisure for reflection, for travel to other centers of learning, and for acquiring of additional (especially interdisciplinary) skills. Once properly trained, they thrive on long-range and continuing financial support, unfettered by administrative claptrap and frequent progress reports. The best type of financial support for them is the unrestricted dollar for individual investigation as opposed to project (goal-directed) research. This dollar goes furthest and yields most.

I would like to repeat that the need is urgent, the shortage of experts is critical. I receive several emergency calls weekly from universities, research institutes, and pharmaceutical laboratories, for assistance in locating trained personnel, but there are few if any available. "Pirating" is one evil consequence of this shortage, particularly because university professors are enticed into applied industrial research by the high salaries offered as inducement. Another unhealthy consequence is the placing of only partially trained people in positions of responsibility, in order to fill the breach. Both of these trends must be reversed. Adequately high fellowship stipends can serve to attract into medical research those young scientists who otherwise are destined to go into more lucrative professions. As a famous physiologist once said, "You don't keep a young scholar on his toes by keeping him on his knees." And once such young men are properly trained for academic careers in medical research institutions, they should be given the security, the freedom, and the monetary rewards and prestige commensurate with the importance of their contributions to society.

Recognition of the critical shortage of pharmacologists (and especially of psychopharmacologists and neuropharmacologists) has recently resulted in two salutary developments. First, the American Society for Pharmacology and Experimental Therapeutics, the official U.S. professional group of which I am president-elect, has embarked on an ambitious recruitment program to attract bright young scholars into the field. This program is under the direction of the society's educational affairs committee, and a formal grant application has been made this spring to the NIH for long-term financial support of the activities of this committee. These activities include not only recruitment, but continuous study of the most fruitful training methods and continuous analysis of the problem of supply and demand. (The American Physiological Society is making a similar application for funds to support its newly launched recruitment program.) I have heard that the National Advisory Health Council, for administrative reasons, may not grant this urgent request of our society. We would suggest that its members be asked by the Congress to adjust their administrative policy to permit the granting of funds to professional academic societies such as ours, to enable us to do the educational and recruiting job that must be done.

Second, various divisions of the NSF and the NIH have expanded their graduate fellowship and training programs. Of immediate benefit to psychopharmacology are the programs of the National Institute of Mental Health and the NIH Pharmacology Training Committee of the Division of General Medical Sciences. An increasing number of departments of pharmacology in medical schools in the United States are receiving critically necessary financial assistance for their graduate training functions from the last-named NIH agency. However, most of these departments of pharmacology are directing their training efforts chiefly in the predoctoral area, and only a few include psychopharmacology in their programs.

With regard to the Psychopharmacology Service Center, although the research grant awards made by it do permit on-the-job training for affiliated personnel, it has no training grant functions of its own. Serious thought should be given to the possibility of a special facility for developing postdoctoral training grant programs in psychopharmacology, separate from the many other programs of

the NIMH. It seems to us that this facility should be under the auspices of the Psychopharmacology Service Center, because this center has the information, the orientation, the staff, the extramural advisory committees, and the know-how in the field.

In support of our view concerning the critical need for university-trained psychopharmacologists, appendix A is attached hereto, which presents the resolution recently drafted and signed by some of the leading psychopharmacologists and neurophysiologists in the United States. Please observe closely that all the seven signers from pharmaceutical laboratories unreservedly endorse the proposal that the type of multidisciplinary training urgently needed in psychopharmacology can be obtained only in academic institutions of higher learning, not in commercial laboratories.

If the PSC is ever unable to spend all of its requested appropriation, the reason is not far to seek. It simply means that an insufficient number of meritorious projects has been submitted to it. How can this be in a research area that is expanding with explosive rapidity? The answer is simply that there is a lack of qualified investigators in the field. Once we train qualified investigators in sufficient numbers, meritorious research requests will no longer be a problem. These investigators must be trained in universities, not in industry. Even industrial scientists agree to this basic principle.

Shortage of clinical pharmacologists

The clinical pharmacologist is a special class of investigator who is expert in the testing of drugs in man, under carefully controlled experimental conditions in the hospital and outpatient clinic. He is the one who can best decide which of the many new chemicals, discovered in the laboratory, show sufficient therapeutic promise and safety to warrant their release for wide use by the medical profession. The clinical pharmacologist is not only an expert internist who is thoroughly grounded in basic pharmacodynamics, but he is also particularly competent in the design and statistical interpretation of experiments on drug effects in patients. In my opinion, Dr. Louis Lasagna, associate professor of medicine, pharmacology, and experimental therapeutics, the Johns Hopkins University School of Medicine, is the leading clinical pharmacologist in the United States. There is a critical shortage of people trained the way he is trained. Indeed, one can count such persons on one's fingers.

The problem is particularly acute in the field of new drugs for mental illnesses, for two reasons: First, this field requires that the clinical experimenter have special neurological and psychiatric skills; second, the inordinately large number of new chemicals that industry wants tested in human beings is much greater than the number of competent facilities and competent experimenters available for such testing. It should be emphasized that even highly expert psychiatrists are not necessarily the proper persons to conduct controlled tests to delineate the clinical value or toxicity of new psychotropic chemicals. All too often they are not trained in clinical pharmacodynamics, in experimental design, and in biostatistics. We need many more Dr. Lasagnas. All informed persons, including many medical directors of our pharmaceutical companies, recognize that the dearth of clinical pharmacologists in the United States is a major bottleneck in the discovery of better drugs for mental disease. One readily grants that more precise, relevant, and dependable methods of laboratory appraisal of new chemicals are needed in order accurately to predict their potential clinical value as drugs for specific psychiatric disorders. But also critically essential are definite, properly controlled clinical studies by experts before new drugs are released to the medical profession. This problem must be solved. I am not prepared at this time to make definitive recommendations for its solution. But certainly Dr. Lasagna's wide experience should be drawn upon by any NIH agency interested in the problem.

(3) *The Psychopharmacology Service Center and the pharmaceutical industry.*—In our opinion, it is a serious error to give "marching orders" to the Psychopharmacology Service Center, as was apparently done by the Congress last year, to initiate contract or grant research programs in the pharmaceutical industry. During the past year, much time and energy were expended by the staff of the PSC in an attempt to initiate such programs. Most of this effort was wasted, and the staff was thereby distracted to that extent from more important endeavors. If and when pharmaceutical companies wish to apply to the NIMH for research or contract funds for the support of meritorious investigations by their scientists in the field of psychopharmacology, they are privi-

leged to do so, and the present machinery and directives of the PSC are adequate. Funds should not be earmarked especially for the pharmaceutical industry. Funds should be disbursed as at present, rigidly on the basis of merit as determined by extramural advisory committees composed of the Nation's leading experts.

Indeed, the pharmaceutical industry itself has spoken out clearly and emphatically on this point. A most important statement was approved by the board of directors of the Pharmaceutical Manufacturers Association, at a meeting in New York City on January 8, 1959. This statement appears in appendix B, and is concerned with governmental support of medical research. It should be studied by everyone whose duty it is to appropriate and allocate Federal funds for research in the medical and public health fields. We concur fully in the opinions forcefully expressed by the board of directors. The statement emphasizes that highest priority should be given to the training of additional teachers and research personnel and goes on to say that, "Government funds should be principally allocated to basic research objectives, to expand our fundamental knowledge in all medical fields, rather than to applied research and development. Except in unusual circumstances, Government funds should therefore be allocated to nonprofit institutions, such as medical schools, hospitals, and research institutions, rather than to private industry." Hence, we repeat that it is a mistake specifically to direct the PSC staff further to explore contract and research grant possibilities in pharmaceutical companies.

(4) *Adequate salaries for the staff members of the Psychopharmacology Service Center.*—What we have to say in this connection applies equally to other NIH agencies, but we are more intimately acquainted with the staff of the PSC and hence will restrict our remarks mainly to their problem. It is absolutely essential to pay salaries sufficiently high to attract and retain qualified and competent staff members for programs such as that of the PSC. Many of these staff people are research workers, highly trained and highly regarded in their professions. They have entered public service out of devotion to the task that must be done. Rarely is such dedication seen, even in university life. Their work is difficult and stressful, and entails long hours, much travel, skill in interpersonal relations, and an intimate knowledge of the research aspects of the problems involved.

These scientific staff members could readily command much higher salaries in industry, in universities, in lay health organizations, or in the private practice of their professions. It is our good fortune that, for the present at least, they have elected to remain with the NIH. But we should not thereby be tempted to push our luck too far. "Pirating" is common practice when top positions are open and competent people are scarce.

The Congress votes many millions of dollars annually for the intramural and extramural research programs of the NIH. These programs are administered by highly trained individuals, many of whom are scientists. We can envisage a situation whereby the sudden loss of a relatively small number of such key administrative personnel could jeopardize the functioning of the entire program, that is, the wise expenditure of the many millions involved.

It is for this reason that we urge that preventive measures be taken immediately. Discontent and resignation are almost inevitable when, to cite but one example, a highly trained psychiatrist, such as the Chief of the PSC, receives only \$13,000 a year. Furthermore, this salary scale makes it difficult or impossible for him to recruit the necessary additional psychiatrists and other personnel urgently needed for the PSC. Dr. Jonathan Cole tells us that several university psychiatrists have refused to join his staff because to do so at the present allowable salary scale would mean cutting their income in half. We also understand that Dr. Joel Elkes is experiencing a similar difficulty in recruiting a senior scientist for the Neuropharmacology Research Center at St. Elizabeths Hospital in the District of Columbia. You may know that Dr. Elkes is the distinguished scientist of the NIMH who is in charge of the research activities at the hospital mentioned.

The recruitment of pharmacologists and psychologists is similarly handicapped by the unrealistic civil service salary scale. This scale is below that of industry, of private practice, and even of university posts. Also the per diem travel allowance (\$12 per day) is mildly ridiculous. If the PSC is to continue to retain the excellent staff which it has assembled in the past 2 years, not only must its present key members be adequately paid but the salary scale for the additional people urgently needed must be sufficiently high and sufficiently flexible to permit successful competition in a very tight market.

Low salaries and low per diem travel allowances have already been cited as two obstacles. A third is the nonpayment of moving expenses for new personnel. For example, our pharmacology society is greatly disturbed by the fact that pharmacology is not listed by the Civil Service Commission as a scientific profession whose members are entitled to payment of moving and traveling expenses when they join the NIH staff. Chemists and architects are so entitled, but pharmacologists are not. This is an unwholesome situation which should be immediately corrected. Up to now, official representations by our society have proved fruitless. Someone in authority should tell the Civil Service Commission the facts of life.

In summary, we would advise that high-salary positions be made available to the PSC, which are exempted from civil service restrictions, that pharmacologists be added to the official register, and that adequate per diem travel expenses be paid. We understand that certain exempted, supergrade positions for senior scientists in the NIH intramural research program pay salaries up to \$19,000 per year. Scientifically trained research administrators in the extramural program should be permitted comparable salaries. The situation should be analogous to that in our medical schools, where the administrative dean receives a salary at least as high as that of the chairman of his scientific departments. Everything possible should be done to make the posts of research administrators more attractive. Only in this way can the staffs already assembled be kept intact, and the most urgent needs for additional staff be satisfied. The multimillion-dollar appropriation made annually to the NIH will then be administered by people who are adequately rewarded for their dedicated service. We have been advised that at least two positions with grade levels higher than GS-15 are needed in the PSC. Certainly a number of similar positions must be needed in other phases of the many extramural programs of the NIH.

(5) *General lessons from the U.S.S.R.*—The U.S.S.R. Ministry of Health, through its Academy of Medical Sciences, has placed prime emphasis on neuropharmacology in its various 5- and 7-year plans for medical research. I was a member of an official six-man team which visited the U.S.S.R., November–December 1958, under the auspices of the Departments of State and Health, Education, and Welfare, with the specific objective of studying neurological institutes and research in the Soviet Union. A complete report is being made to the Surgeon General, Public Health Service. What most impressed me was the seemingly unlimited amount of money, scientific manpower (including many women), equipment, technical assistance, and physical facilities available for basic research in the neurological sciences, and the very high esteem in which leaders in this field are held. Indeed, they are the aristocrats of medical research in the Soviet Union. Their salaries are high, they have the choice apartments, they have free limousines and chauffeurs, they have 2 months for vacation each year, and they have adequate travel privileges for research meetings. Scientifically, their lot is a happy one. One must constantly remember that the neurological sciences in the U.S.S.R. include the behavioral sciences, and that the latter embrace the entire spectrum from control of individual human and group behavior to the training of animals and man for flight into outer space. Nothing seen by me would warrant smugness or complacency on our part. The lessons are there for all to read, in large letters.

BUDGETARY RECOMMENDATIONS

On the basis of the foregoing information and views, Dr. Lasagna and I propose the following budgetary recommendations.

We recommend that the appropriation for the Psychopharmacology Service Center for fiscal year 1960 be at the level of \$8.5 million, namely, \$2.5 million more than the President's original request of \$6 million. We arrive at this figure from the following estimates. Since fiscal year 1956, when the NIMH awarded \$324,000 for the support of research in this area, the grant program in PSC has increased twelvefold. In fiscal year 1959, for example, more than \$4 million will have been spent by the PSC to support meritorious research projects. To be sure, not all of its 1959 appropriation has been spent, and the primary reason for this has been pointed out by us. But the rate of expansion is still in the "logarithmic" phase, and flexible and adequate funds are required to meet the expected expansion in fiscal year 1960 and to initiate a training program, as will be shortly explained.

Of the \$8.5 million, we anticipate that \$7 million will cover the basic research grant requests and the special contract items. This sum will also permit a

reasonable expansion in the current Psychopharmacology Service Center program to accelerate the clinical evaluation of new drugs in a number of carefully selected mental hospitals which have the know-how but lack the funds for personnel and the other operating costs of such drug studies in psychiatric patients. It will also permit a reasonable number of grants to be made to qualified investigators interested in exploring new clinical evaluation techniques.

The remaining \$1.5 million should be spent to initiate and support a postdoctoral training program specifically directed to produce more basic research psychopharmacologists. The critical need for such people has been outlined in some detail; the shortage of this type of scientist is the major bottleneck. We are talking here about training psychiatrists how to evaluate new drugs or about training general medical practitioners how to handle psychiatric patients, important as such training may be. What we are recommending is far more fundamental. We envisage the initiation and expansion of training programs in the graduate divisions of medical schools and universities whereby young physicians and young Ph.D.'s are trained for academic and research careers in psychopharmacology. The training can be done in departments of experimental psychology (particularly, animal behavioral psychology), in departments of pharmacology (particularly, those which are devoted to neuropharmacology), in departments of neurophysiology, and in departments of experimental psychiatry. For example, in order to obtain the necessary multidisciplinary skills, a young Ph.D. in animal behavioral psychology would join a training program in a department of neurophysiology or neuropharmacology; a young Ph.D. in neurophysiology or neuropharmacology would join a department of experimental psychiatry or psychology; etc. Also recruitment among recent graduates in neuroanatomy, neurobiochemistry, and biophysics would supply additional postdoctoral trainees. The availability of high-level postdoctoral stipends would make the task of recruitment easier.

We emphasize once again that this postdoctoral training program in psychopharmacology should be separated from the other NIMH. training grant programs. It should be made under the direct control of the Psychopharmacology Service Center, both administratively and budgetwise. The reasons to this have been given. We also emphasize again that the training programs be initiated in universities and nonprofit research institutes, not in pharmaceutical laboratories. The reasons for this have likewise been given.

CONCLUSIONS

1. *Basic research.*—Basic research in psychopharmacology is pivotal for all future progress in the field of drug therapy of mental illness, our Nation's leading public health problem. Basic research rather than developmental or applied research should be fostered by Federal funds. The vistas are unlimited.

2. *Short of research workers in psychopharmacology.*—The critical shortage of psychopharmacologists can best be corrected by the support of a special program of postdoctoral training, under the auspices of the Psychopharmacology Service Center. The National Advisory Health Council should be requested to award grants to professional scientific societies in the medical and public health fields, to enable them to undertake or continue recruitment programs whereby promising young scientists can be attracted into research and academic careers in the basic medical sciences. Attention must also soon be given to the shortage of clinical pharmacologists.

3. *Grants and contracts in industry.*—The Psychopharmacology Service Center currently has adequate authority to conclude research grants and contracts with industry, on the basis of merit. It should not be directed to seek out such grants or contracts, and special funds should not be earmarked for this purpose.

4. *Adequately high salaries for research administrators.*—High-salary positions should be made available to the Psychopharmacology Service Center (and other NIH agencies) so that efficient research administrators can be attracted and retained. The multi-million-dollar appropriation made annually by the Congress to the NIH extramural programs will thereby be safeguarded and administered wisely.

The Civil Service Commission should be requested to add pharmacology to their official list of scientific professions whose members are entitled to the special benefits received by others.

5. *Budgetary recommendations.*—We recommend that an appropriation of \$8.5 million be made to the Psychopharmacology Service Center for the fiscal year 1960. This total includes \$7 million which is mainly for support of basic

research; but it will also permit reasonable expansion of the program for drug evaluation in mental patients, and research in the area of new clinical evaluation techniques. The remaining \$1.5 million is recommended for the support of a post-doctoral multidisciplinary training program in psychopharmacology, administratively under the control of the Psychopharmacology Service Center.

APPENDIX A

We the undersigned, a group of scientists from universities and pharmaceutical laboratories engaged in research in psychopharmacology, consider that the lack of qualified scientists in this field hampers the progress of psychopharmacology more than any other single factor, such as lack of financial support or of physical facilities.

It is realized that such specialists must be educated in a training program involving multiple disciplines—pharmacology, psychiatry, psychology, neurophysiology, and biochemistry, and possibly other allied medical sciences. This type of training can only be achieved in universities and similar academic institutions of higher learning. In order to attract qualified predoctoral and post-doctoral candidates to such a program, it is necessary to provide adequate stipends for them and also to provide adequate equipment and financial support for those institutions qualified to accept this important responsibility.

For these reasons we urge that a substantial part of the funds requested from the Congress of the United States for the promotion of psychopharmacology be permitted to be utilized for training programs designed to fill the needs for qualified psychopharmacologists.

(The signers represent themselves, not their institutions.)

Klaus Unna, Department of Pharmacology, University of Illinois College of Medicine, Chicago, Ill.; Edward F. Domino, Department of Pharmacology, University of Michigan Medical School, Ann Arbor, Mich.; James E. P. Toman, Department of Physiology and Pharmacology, the Chicago Medical School, Chicago, Ill.; Keith Killam, Department of Pharmacology, University of California Medical Center, Los Angeles, Calif.; Irwin H. Slater, Lilly Research Laboratories, Indianapolis, Ind.; Nicholas Plotnikoff, Stanford Research Institute, Menlo Park, Calif.; Robert Galambos, Department of Neurophysiology, Walter Reed Army Institute of Research, Washington, D.C.; Jurg A. Schneider, Charles Pfizer & Co., Inc., Maywood, N.J.; W. B. Schallek, Hoffman-La Roche, Inc., Nutley, N.J.; William Funderburk, Miles Ames Laboratories, Elkhart, Ind.; Ernest B. Sigg, Geigy Chemical Corp., Ardsley, N.Y.; Barbara Brown, Riker Laboratories, Northridge, Calif.; Vernon G. Vernier, Merck Institute for Therapeutic Research, West Point, Pa.

WASHINGTON, D.C., March 6, 1959.

APPENDIX B

PHARMACEUTICAL MANUFACTURERS ASSOCIATION STATEMENT ON GOVERNMENTAL SUPPORT OF MEDICAL RESEARCH

The board of directors of the Pharmaceutical Manufacturers Association believe that it is constructive at this time to state their views as to the support of medical research and education by the Federal Government. At their meeting in New York City, January 8, 1959, they therefore approved the following statement.

In 1940, according to the report of the Committee of Consultants to the Secretary of Health, Education, and Welfare, commonly known as the Bayne-Jones report, the Federal Government contributed \$3 million to medical research. In 1958 Federal expenditure for medical research reached \$227 million. (Data relating to the National Institutes of Health, September 1958.)

The pressures upon the Congress and upon Federal agencies for practical results are apparent and unquestionably will increase in direct relation to the size of the expenditures. But as the Bayne-Jones report states, "pressures for

practical results cannot be allowed to supersede the kind of fundamental studies which, over the long run, produce revolutions rather than merely improvements in health standards." In his communication of last July to President Eisenhower, Dr. Alan T. Waterman, Director of the National Science Foundation, makes a similar statement: "As history amply records, the most epoch-making scientific discoveries have come from basic research."

Some noteworthy basic research is being carried out in the laboratories of the pharmaceutical industry, but the major centers for this basic effort are nonprofit institutions, universities, medical schools, and research institutions. The research and development work of our industry largely rests on this foundation. On the other hand, the pharmaceutical industry, with its \$127 million expenditure in 1957, and at least \$170 million in 1958, already does outstanding applied research and development leading to clinically useful products. After every advance in the laboratory and clinic, it has been the pharmaceutical industry which, with its own funds, has created the modern medicines which have benefited so many.

The present cancer chemotherapy program, involving an extensive series of contracts with pharmaceutical firms, should not be taken as a precedent for the attack on other disease categories. In the cancer field, the lack of leads after so many years of effort, together with the nature of the problem, probably required a Government subsidy to industry (devoted principally to an experimental mass screening program of all types of chemical agents) in order to supplement the basic research program being carried on in the laboratories of nonprofit institutions.

In fields other than cancer, the pharmaceutical houses are pushing the search for new drugs with adequate funds and with every means at their disposal in the light of present knowledge. It is our basic knowledge that needs to be increased, as rapidly as possible, and Federal funds should be channeled to academic institutions, which need them to support and expand their basic research.

Moreover, in our total medical research activities the paramount problem is the critical shortage of scientific personnel. The extent of this personnel shortage is well documented: The Bayne-Jones report indicated that 25,000 additional scientists will be needed by 1970, but that present training facilities will provide only 19,000. This is a deficit of more than 30 percent. A recent editorial in the JAMA (November 15, 1958) points out the alarming number of unfilled faculty positions in our medical schools even today.

Government subsidies for industrial research would still further accentuate this manpower problem. It must be recognized that there are only three ways by which a pharmaceutical firm can staff a Government-subsidized project. The first is to divert its own scientists from projects on which they are already working. The second is to obtain additional personnel from other firms, which results in a wasteful pattern of raiding. The third—easiest but most destructive—is to obtain the needed people from academic life, thus depleting still further the supply of teachers and scientists engaged in basic research.

In view of the current trend toward Government-industry "crash programs" in electronics, aircraft, and other fields of research, it may seem surprising for the pharmaceutical industry to urge that funds for medical research go mainly to academic institutions. For the reasons stated above, however, this board believes that in the allocation of Federal funds for medical research—which as the Bayne-Jones report states is inherently inseparable from medical education and training—the following principles should be adopted.

1. Since our further progress in medicine directly depends upon the supply of highly qualified scientists, the training of additional teachers and research personnel should have highest priority.

2. Government funds should be principally allocated to basic research objectives, to expand our fundamental knowledge in all medical fields, rather than to applied research and development.

3. Except in unusual circumstances, Government funds should therefore be allocated to nonprofit institutions, such as medical schools, hospitals, and research institutions, rather than to private industry. Private industry should be subsidized only in cases where no nonprofit organization can do the job. In such exceptional cases, however, full cooperation can be expected from a pharmaceutical firm approached by the Federal Government because of its unique qualifications.

INTRODUCTION OF WITNESSES

Senator HILL. Dr. H. Houston Merritt, dean of the College of Physicians and Surgeons, Columbia University, and professor of neurology, Columbia University; also director, Neurological Institute, New York, and chairman, Program Planning Committee, National Advisory Neurological Diseases and Blindness Council.

Doctor, you have been with us before. We are delighted to have you. We are also delighted to have Dr. Steward H. Clifford, assistant clinical professor of pediatrics, Harvard Medical School; pediatrician, Boston Lying-in Hospital; chief, newborn service at Children's Medical Center, Boston. Dr. Alson E. Braley, head, department of ophthalmology, University of Iowa Medical School; and Dr. Martin F. Palmer, professor of logopedics, University of Wichita.

That is a new word that has crept in, isn't it?

Dr. PALMER. That is right.

Senator HILL. Director, Institute of Logopedics, Wichita; past president, American Speech and Hearing Association; member, Research Advisory Committee of the United Cerebral Palsy Research and Educational Foundation.

Gentlemen, we welcome you here. We very much appreciate your presence. And now we would be delighted to have you proceed in your own way.

Dr. Merritt, will you proceed?

RESEARCH IN NEUROLOGICAL DISORDERS

STATEMENTS OF DR. H. HOUSTON MERRITT, DEAN, COLLEGE OF PHYSICIANS AND SURGEONS, COLUMBIA UNIVERSITY; PROFESSOR OF NEUROLOGY, COLUMBIA UNIVERSITY; DIRECTOR, NEUROLOGICAL INSTITUTE, NEW YORK; CHAIRMAN, PROGRAM PLANNING COMMITTEE, NATIONAL ADVISORY NEUROLOGICAL DISEASES AND BLINDNESS COUNCIL. DR. STEWARD H. CLIFFORD, ASSISTANT CLINICAL PROFESSOR OF PEDIATRICS, HARVARD MEDICAL SCHOOL; PEDIATRICIAN, BOSTON LYING-IN HOSPITAL; CHIEF, NEWBORN SERVICE AT CHILDREN'S MEDICAL CENTER, BOSTON; DR. ALSON E. BRALEY, HEAD, DEPARTMENT OF OPHTHALMOLOGY, UNIVERSITY OF IOWA MEDICAL SCHOOL; AND DR. MARTIN F. PALMER (SCD), PROFESSOR OF LOGOPEDICS, UNIVERSITY OF WICHITA; DIRECTOR, INSTITUTE OF LOGOPEDICS, WICHITA; PAST PRESIDENT, AMERICAN SPEECH AND HEARING ASSOCIATION; MEMBER, RESEARCH ADVISORY COMMITTEE OF THE UNITED CEREBRAL PALSY RESEARCH AND EDUCATIONAL FOUNDATION

GENERAL STATEMENT

Dr. MERRITT. Thank you, Senator Hill and Senator Smith.

You have my prepared statement, and in the interest of economy of time, I will just discuss some of the things in there briefly.

It seems it is always my fortune to follow eloquent speakers who can present things in much more lucid terms than my clumsy tongue can do.

Senator HILL. Doctor, you take your time, but if there is any part of your prepared statement to which you do not address yourself, we will have it appear in full in the record.

Dr. MERRITT. Thank you, sir.

Our interest here is very much linked with the interest of the Institute of Mental Health, because we are both dealing with the central controlling organ of the body—that is, the brain—and our programs are complementary.

I am H. Houston Merritt, dean of the College of Physicians and Surgeons, Columbia University; professor of neurology at the university; director of the New York Neurological Institute, and chairman of the program planning committee of the National Advisory Neurological Diseases and Blindness Council.

I am here today as spokesman for the National Committee for Research in Neurological Disorders. The committee is composed of two of our largest neurological societies and the voluntary health organizations vitally concerned with the impact of neurological disorders upon our society. These include United Cerebral Palsy, Association for the Aid of Crippled Children, National Society for Crippled Children and Adults, Inc., National Epilepsy League, Inc., The National Foundation, National Multiple Sclerosis Society, Muscular Dystrophy Associations of America, Inc., National Association for Retarded Children, American Foundation for the Blind, Inc., National Society for the Prevention of Blindness, National Neurological Research Foundation, and the two national neurological societies—American Academy of Neurology and the American Neurological Association.

As you know, the committee was organized in 1952 to assist the Director of the National Institute of Neurological Diseases and Blindness in blueprinting a national research program in neurological and sensory disorders. It serves to coordinate research programs in these areas and helps to prevent the splintering of such research from its central core. Each year it studies carefully the research and training fund needs of the Institute and makes a budgetary estimate of those needs.

The National Committee for Research in Neurological Disorders has reviewed carefully with Dr. Pearce Bailey the Institute's program developments and research achievements of the past year. I know that Dr. Bailey has also given you a detailed review of these developments. Therefore, I should like to limit my remarks to: (1) general statements; (2) changes in program emphases; (3) key discoveries; and (4) new opportunities.

PROBLEMS OF NEUROLOGICAL STUDY

As I have indicated to you on other occasions, neurology is an area in which there are many unanswered problems. Of the 20 million who suffer from various neurological and sensory disorders, a large percentage have been afflicted since birth or early childhood. Such long periods of disability result in a tremendous drain psychologically and financially on the families and communities of these individuals

and upon the total economy, as well as untold suffering to all those afflicted.

The appropriations which you gentlemen have made available since the Institute was established in 1950 have brought hope to these sufferers. Very largely through grants from the National Institute of Neurological Diseases and Blindness to the medical schools and the research centers throughout the Nation, the situation has been improved. Although much remains to be done, through the increased manpower now available for teaching and research, as well as many new research findings and techniques, I believe that research in neurological and sensory disorders is poised on the threshold of a period of even more rapid growth and greater research discoveries. If sufficient funds can be made available to this area of research at this time, I believe some far-reaching and significant advances can be made in the next few years.

STUDIES IN EPILEPSY

Advances in epilepsy research continue to be most encouraging. We now know that epileptic seizures result from various conditions—some associated with brain injury and others with abnormal chemical reactions. Through surgical treatment and the use of anticonvulsants, it is already possible for approximately 80 percent of all persons with epilepsy to be gainfully employed.

During the past year, artificially induced seizures in patients suffering from epilepsy and studied through the use of depth recording techniques has made it possible to locate more accurately the area of the brain involved. This has improved the accuracy of surgical removal of epileptic foci from which the seizures originate.

In the chemical control of seizures, it is now evident that hormonal factors may play a part in influencing seizure threshold and susceptibility to convulsions. Increased attention has also been given to those agents and enzymes capable of influencing the normal metabolic and chemical processes within the brain. Carefully controlled studies are now underway to learn more concerning these factors.

DISORDERS OF MUSCLE

Among the most difficult neurological problems to solve have been the disorders of muscle. These disorders can be generally divided into three areas: those destroying the muscle tissue, affecting the muscle exciting system, or inflaming the muscle. In other words, the muscular dystrophies, myasthenia gravis, and myositis. It has been extremely difficult to differentiate among these categories as well as the entities within the categories. More recently, a multidisciplinary approach has been made to the problem, and the clinical, biochemical, and electrophysical aspects have been studied at the same time.

In differentiating among the categories, the electron microscope and new staining techniques through which the nerve terminations can be seen have added greatly to our knowledge.

We know that there is an abnormal protein content in dystrophic muscle. The distribution of this protein is being studied by the use of fluorescent-labeled elements, through radioactive tracers, and through the development of specific antibodies which carry a dye directly to the specific protein molecules under investigation.

Many myasthenia gravis patients are now helped through the use of various chemical compounds. Further study along this line is under-way and a number of anticholinesterase drugs are being tested.

Although there is no known cure or fully effective treatment for multiple sclerosis, investigators are encouraged by many research findings relating to the biochemistry of the disease.

ROLE OF MYELIN IN MULTIPLE SCLEROSIS

I have spoken to you before of the protective covering, or myelin sheath, which ordinarily surrounds nerves, but which disappears in patches when multiple sclerosis is present. In an effort to understand why this happens and to halt the process, it is necessary to know about myelin. An essential compound in the fact of myelin was found to be sphingosine and I have previously reported to you that we now know how to synthesize it. This year, our understanding of sphingosine was increased when a new mechanism was discovered for the lengthening of carbon chains leading to a product which subsequently is oxidized to sphingosine.

New information has also been found concerning an enzyme related to demyelination, the disappearance of myelin. Experiments with both cats and fowl hold hope of a definite relationship between this enzyme and the formation of myelin.

Epidemiological studies this past year give further support to previously reported findings concerning the geographic distribution of multiple sclerosis. We now know that multiple sclerosis is far more prevalent in the northern part of this country and other countries than in the southern areas. But we do not know the significance of these facts. Does climate itself have something to do with the disease, is it mineral content of the soil, or lack of it, in certain areas, or does weather serve to trigger some unknown element?

PARKINSON'S DISEASE

Parkinson's disease, largely affecting persons past 50, is of great concern, particularly with the population in the upper age brackets increasing rapidly. Research has continued both at the Institute and at supported research centers in an effort to find more effective drugs to control the symptoms of Parkinsonism and more effective surgery for those patients who might benefit from this procedure. In addition to clinical research, basic research on the brain and its functioning has continued to add to our understanding of this disorder and give hope that it may someday be prevented.

CEREBRO-VASCULAR RESEARCH

Since late 1957, when the Institute initiated its cooperative program to evaluate the use of anticoagulants as preventives for strokes, six medical centers have been participating in the program. An estimated total of 1,800 patients will have participated in the study which is scheduled to last 2 more years before definitive results can be obtained. This number of patients is far beyond the number available for study by any one institution except over a period of many years. The project was made possible through the Institute's grants program.

It is a companion study to the broad, nationwide cerebro-vascular research project. However, this effort is specifically concerned with prevention of cerebral stroke rather than with treatment after onset. Also, it is exclusively concerned with anticoagulant preventives.

COLLABORATIVE STUDY ON CEREBRAL PALSY

The largest of various research programs relating to cerebral palsy is the Institute's collaborative study with which you are familiar. Sixteen institutions are now collaborating to evaluate the causes of neurological and sensory disorders arising during pregnancy and the early newborn period. This past year served as a major pretest period for the program. As of January 1, the 40,000 mothers who will participate in the program over a 5-year period started through the study. In a few minutes, Dr. Clifford will tell you more about this program and why we believe that through this study we will discover some of the causes of cerebral palsy, mental retardation, and other neurological and sensory disorders.

As I indicated earlier, neurology is an area in which there are many problems long unanswered. We have been seeking these answers, and will continue to do so, through many types of research—among these biochemistry, electrophysiology, neuroanatomy, and neurophysiology. Perhaps, however, we have been missing an opportunity in not giving more attention to geographic neurology, also referred to as epidemiological studies of neurological disorders on a worldwide basis.

EPIDEMIOLOGY OF NEUROLOGICAL DISORDERS

At one time epidemiology was almost exclusively concerned with the outbreak and control of infectious disease. Today, however, this expanding medical-statistical discipline is being used to evaluate the frequency of all types of disorders and their relationship to genetic and environmental factors.

The epidemiologist is naturally attracted to unusual population situations in which certain disorders are infrequent or in which they are unusually prevalent. Cerebrovascular diseases, for example, appear to be more frequent in American Negroes than in the white population. In this directly related to the higher frequency of high blood pressure in American Negroes or to some other influence? Vascular lesions of the central nervous system are reported as the leading cause of death in Japan. Does this indicate a genetic predisposition, a dietary or other environmental influence, or is it related to the care given patients?

The association of arteriosclerosis with aging in the United States has been considered an almost normal process. This may not necessarily be true. But we must have much more information of the type now being acquired through the cooperative cerebrovascular studies sponsored by the Institute.

Our current knowledge of the course and prognosis of cerebrovascular diseases is largely based on observations of hospitalized populations. This information, unfortunately, omits the milder cases that receive home care as well as those with rapid fatal afflictions who are never hospitalized.

Already a significant number of things have been identified which appear to predispose persons to arteriosclerosis. Among these are hypertension, obesity, and the type of diet, diabetes mellitus, hereditary conditions, involving abnormal metabolism of fats, hyperthyroidism, age, sex, and possibly race and ethnic group memberships. If studies were made of these factors in different countries of the world where the prevalence of stroke is either higher than ours, or much lower than in this country, we might discover some of the answers we are seeking.

INTERNATIONAL WORK IN EPIDEMIOLOGY

Several European reports have offered data indicating that some congenital abnormalities of the central nervous system may occur more commonly in some population groups than in others and that some brain damage may occur more commonly among infants born in winter than in summer months. Some studies in this country along this line have suggested that expectant mothers may tend to choose a protein deficient diet during the warmer summer months. But these suggestions are yet to be proven.

Now, that the Institute and collaborating institutions are studying congenital abnormalities in this country, it would be most unfortunate if we did not take advantage of the excellent groundwork which has been laid for such a study and project some phases of this on an international basis. With a little more effort and a relatively small expenditure of money, we might uncover causes of brain damage through an international approach which we might not find in this country.

I have already spoken of the findings concerning the geographic distribution of multiple sclerosis. In this country, the prevalence is at least five times as great in the northern part of the country as it is in the Deep South.

Amyotrophic lateral sclerosis, or Lou Gehrig's disease as it is often called, has been found to be approximately 100 times more frequent among the native population of Guam than in this country. Present studies are attempting to find out why this is true.

DRUG TESTING

As I indicated to you last year, there is an urgent need for the development and testing of new drugs known to have a stimulant or depressant effect on the central nervous system, especially those which influence the involuntary movement and control of muscle tone, spasms, and seizures.

The development of anticonvulsants which are able to reduce the frequency of epileptic seizures by 50 to 80 percent is a striking achievement and an indication of the gains to be looked for in further exploration in this field. The development of new drugs for epilepsy and more effective compounds for the treatment of myasthenia gravis should be moving forward in a carefully planned way.

I believe an advisory committee of experts from several fields whose interests relate to the effect of drugs on the central nervous system should be established. It should be their responsibility to evaluate the potentialities of new drugs brought to their attention, to suggest possible applications of these agents, and to advise concerning the

methods for testing their efficacy. Their function would be purely advisory and the publication of their deliberations would serve as a stimulus to research in the field.

PRIMATE RESEARCH, PUERTO RICO

The current success of the Puerto Rican project justifies an extension of its program and the development of a primate research center. Originally, the object of scientific work with the colony was to determine whether cerebral palsy, mental retardation, and other neurological and sensory disorders could be reproduced in monkeys by experimentally induced brain damage. Since it had previously been demonstrated that brain damage associated with mental retardation could be induced in guinea pigs by partial asphyxiation at birth, the same procedure was followed with monkeys.

This procedure consists of asphyxiating for varying periods of time, by clamping off the placental circulation with the mother, and then artificially resuscitating the baby monkey. The asphyxiated infants have been found to lack motor coordination similar to cerebral palsy in humans. Some have seizures and the early learning ability is affected.

The initial phase of this project has been accomplished. The project will now search for methods to reverse the sustained brain damage due to asphyxia and will test other agents and conditions which may produce brain damage. These will include viral infections, malnutrition, and experimentally produced metabolic and endocrine disorders.

Increased laboratories will be necessary to test the possible effects of these agents and, eventually, to correlate these artificially produced disturbances with similar disorders in humans.

The Santiago colony offers a unique opportunity for this study. It is the only place on the Western Hemisphere where monkeys of all ages can be seen living under apparently completely satisfactory nutritional and social conditions. It is generally agreed that in studies of the nervous system it is important that the experimental animal be as closely comparable to man as possible, both physiologically and developmentally. The reproductive process in the monkey is almost identical with that in man and it is also the most suitable animal for the development of standard neurological examinations and for the application of standard neurological laboratory tests.

The various voluntary health agencies are aware of the significance of such studies. In fact, several years ago, under the auspices of the University of Puerto Rico and NINDB, a number of them sponsored a symposium in Puerto Rico on the relation of asphyxia to brain damage. Among these were United Cerebral Palsy, Association for the Aid of Crippled Children, and National Multiple Sclerosis Society. Also sponsoring was the National Science Foundation.

WORLDWIDE INTEREST IN PROJECT

Very extensive national and international interest has now been shown in the project. Scientists from Columbia and Northwestern Universities and from the University of South Carolina are already participating. The project has been visited by representatives from

many other institutions and there is indication that there may be some collaboration with scientists from the Medical School of California, Harvard, University College of the West Indies, Yale, University of Wisconsin, Duke, and Washington University. Dr. Geoffrey Dawes, director, Nuffield Institute of Medical Research, Oxford University, has visited the project and collaborative efforts are being initiated. Dr. Ludo van Bogaert, president of the World Federation of Neurology, Antwerp, Belgium, has also expressed interest in collaboration.

APPROPRIATIONS FOR TRAINING GRANTS

The appropriations which you have made available has made it possible to train many neurologists and fill a long-time need in many areas of the Nation. Many of these neurologists are now taking their places on the teaching staffs of the medical schools and in the research laboratories of the Nation.

This has been a program of graduate research training in the sciences pertinent to neurology. Under such grants, medical schools have acquired staffs to aid in the neurological training program, necessary equipment and supplies, and training stipends for graduate students. Such programs are established for neurology in 50 medical schools, for ophthalmology in 30 schools, and for otolaryngology in 20 schools.

NEED FOR WORK IN UNDERGRADUATE FIELD

However, at the present time, for those schools which have been unable to develop a graduate program, there is practically no training in neurology or the sensory field. Consequently, over half of today's medical students are being graduated with inadequate training in this area.

This undergraduate deficit, coming as it does at the most critical time in a student's professional career, results in both a lack of knowledge and a lack of interest in the neurological and sensory disease field. Therefore, with a deep interest in neurological research and a belief that all practicing physicians should have some understanding of neurological disorders, I heartily recommend that an undergraduate training grants program in neurology be initiated.

INCREASED FUNDS REQUESTED

The total budget proposed by the committee was \$45,036,000. However, significant program developments, including possibilities for expanded international medical research activities, for development and testing of drugs, for undergraduate training programs, for a primate research center in Puerto Rico, and for expansion of direct research activities at Bethesda indicate that there should be an additional increase of \$3,930,000, for a total of \$48,966,000.

Before discussing the 1960 proposal, I should emphasize that the national committee's budget proposals, which have been made annually since 1953, are presented only after careful studies and surveys have been made in terms of the Institute's actual needs. If you review the committee's annual proposals since 1953, you will note that the committee's recommendations have just about paralleled the Institute's spontaneous and productive growth.

The committee recommends an appropriation of \$37,636,000 for 1960, for grants in research and training.

Of this amount, the committee recommends that \$28,600,000 be appropriated for research projects, including field investigations; this is an increase of \$11,745,000 over the amount appropriated in 1959. This increase is predicated on the payment of full indirect costs. The committee also endorses the concept of the institutional grant.

BASIS OF REQUEST

The proposed increases in research projects are made on a basis of (1) the estimated backlog of unpaid, approved research project applications in 1959; (2) the estimated need for support of new research projects in 1960; and (3) the need for development of collaborative and cooperative field investigations, both nationally and internationally.

The 1959 appropriation in research projects is \$16,855,000. Applications approved by the National Advisory Neurological Diseases and Blindness Council for 1959 total \$276,000 in excess of this figure. In 1960 approximately \$14 million is already committed for research grants and field investigations; anticipated approvals, based on normal growth, are approximately \$9 million. The payment of full indirect costs and the use of institutional grants add another \$3 million, for a total of \$26 million.

The additional needs for cooperative and collaborative programs which our committee believes should be expanded further total \$2,600,000. New programs, either by grants or contracts, in the development and testing of drugs, for Parkinson's disease, epilepsy, and myasthenia gravis, for example, would need \$1 million. Initiation of collaborative and cooperative international geographic neurology programs would need another \$1 million. Another \$600,000 would be needed to initiate studies in endocrinology as it relates to the nervous system.

AMOUNT FOR RESEARCH TRAINING FELLOWSHIPS

The committee recommends that research fellowships for training of promising basic science personnel should be \$536,000.

We have testified earlier to the importance of continued productivity and growth in the training grants program in neurology, ophthalmology, otolaryngology and in the basic sciences, and the special traineeship programs as part of that training activity.

The committee believes that \$8,500,000 should be appropriated in 1960 for training activities. This is an increase of \$2,725,000 over the 1959 appropriation.

TRAINING GRANTS

Training grants should be increased from \$4,275,000 to \$6,500,000, an increase of \$2,225,000. Applications for graduate training grants already committed for support, or likely to be approved for a new period of commitment, total \$4,275,000. An increase of \$2,225,000 in 1960 would permit an increase of approximately 80 more grants.

TRAINEESHIPS

Traineeships should be increased from the 1959 level of \$1,500,000 and 180 awards, to \$2 million and 240 awards in 1960.

The committee also wishes to propose an increase in the direct research operations of the Institute at Bethesda. The collaborative research organization, begun last year, should have an increase of \$500,000 for additional needs to service the collaborative project in perinatal morbidity and to further develop and support currently planned ones in geographic neurology, the testing of drugs, and the studies in endocrinology. The intramural research programs in basic and clinical investigations should also have increased support; \$252,000 is recommended.

INTRAMURAL RESEARCH PROGRAM

The intramural research programs in basic and clinical investigations also should have increased support. The Institute is severely limited in space available to develop its intramural research operations to the scope necessary. It has no program in clinical otology; space for neurology and ophthalmology is badly needed. Basic research in neurochemistry is severely curtailed by lack of facilities, as are biophysics, neuroanatomy and neurophysiology. The Institute should have more space, and we recommend its construction. Initially, we would propose that at least \$300,000 be appropriated for planning such a facility.

Direct training of staff should be increased to \$100,000, from a current level of \$50,000. Another \$361,000 would be necessary for review and approval of extramural operations, and the administration of the Institute.

The total appropriation recommended for direct operations is \$7,400,000, an increase of \$1,163,000 over the 1959 appropriation of \$6,237,000.

The attached table shows the budget proposals of the committee. An addendum to it indicates new program developments.

(The table referred to is as follows:)

Program by activities	1959 appropriation	1960 budget	Increase
1. Grants:			
(a) Research projects.....	\$16,855,000	\$28,600,000	\$11,745,000
Research grants.....	(11,855,000)	(19,600,000)	(7,745,000)
Field investigations.....	(5,000,000)	(9,000,000)	(4,000,000)
(b) Research fellowships.....	536,000	536,000	0
(c) Training.....	5,775,000	8,500,000	2,725,000
Program grants.....	(4,275,000)	(6,500,000)	(2,225,000)
Traineeships.....	(1,500,000)	(2,000,000)	(500,000)
Total extramural.....	23,166,000	37,636,000	14,470,000
2. Direct operations:			
(a) Research.....	5,498,000	6,250,000	752,000
Collaborative research.....	(852,000)	(1,352,000)	(500,000)
(b) Review and approval.....	561,000	850,000	289,000
(c) Training activities.....	50,000	100,000	50,000
(d) Administration.....	128,000	200,000	72,000
Total direct.....	6,237,000	7,400,000	1,163,000
Total.....	29,403,000	45,036,000	15,633,000
New program developments ¹		3,930,000	3,930,000
Total.....		48,966,000	19,563,000

¹ Significant program developments, including initiating an undergraduate training program in neurology, ophthalmology, and otolaryngology, expanding international medical research activities, particularly studies of multiple sclerosis, enlarging the operations of the Puerto Rico project and initiating a primate research center for neurological diseases and sensory disorders there, and constructing new laboratory research space at Bethesda, cause a recommendation for an increase of \$3,930,000, for a total budget of \$48,966,000.

BACKGROUND OF PERINATAL STUDY

Dr. MERRITT. I would like to end my testimony at this moment and call on the other members; and if possible, I would like to discuss the budget that we would think should be given to the Institute for the coming year.

Senator HILL. All right. You would like to discuss the budget after the others have testified, Doctor?

Dr. MERRITT. If it meets with your permission.

Senator HILL. All right. Fine.

Who would you like to call on first, Doctor?

Dr. CLIFFORD. I am Stewart H. Clifford, Mr. Chairman and Senator Smith. It was my great pleasure to appear before this committee last year and present some personal experience and knowledge from one actually participating in the perinatal study sponsored by the National Institute of Neurological Diseases and Blindness. And I would like to this year not go into the background, as I have prepared in a preliminary statement more detail of the background of the project, so that this might be admitted into the record, and you could let me bring you up to date on the progress.

Senator HILL. We will have that appear in full in the record, Doctor.

Dr. CLIFFORD. Thank you, sir.

(The statement referred to follows:)

STATEMENT OF DR. STEWART H. CLIFFORD, NATIONAL INSTITUTE OF
NEUROLOGICAL DISEASES AND BLINDNESS

Mr. Chairman and members of the committee, I am Stewart H. Clifford, assistant clinical professor of pediatrics, Harvard Medical School, and for over 20 years pediatrician in chief of the Boston Lying-In Hospital, a maternity hospital that delivers more than 6,000 infants per year. I am also chief of the Newborn Service at the Children's Medical Center of Boston so the major medical interest of my life has been centered around problems of the newborn.

Until January 1958 I was engaged in the private practice of pediatrics, contributing my time to academic teaching and research on a strictly voluntary basis. Since then I have withdrawn from private practice to devote my full time to the direction of NINDB's collaborative project on cerebral palsy, mental retardation, and other neurological and sensory disorders of infancy and childhood at the Boston Lying-In Hospital.

It was my privilege to appear before this committee a year ago to report to you on the status of the collaborative project. I should now like to summarize progress during the past year and bring you up to date on our overall plans for the future. First, however, I should like to outline some of the factors which make this farsighted program of such importance to our Nation's health.

NEED FOR PRENATAL AND PERINATAL RESEARCH

For many years obstetricians, pediatricians, and public health officials concentrated their attention on efforts to reduce neonatal mortality and morbidity—that is the group of babies who are born alive but who die or develop disease in the first 28 days of life. In the United States during the past 30 years this death rate has been cut in half, from 36 to 18 per 1,000 live births. This is a very gratifying reduction, but the Nation is still losing 80,000 newborn babies a year. The reduction in the number of deaths has been entirely in the infants who have managed to survive the first 3 days after birth. The fact that challenges every worker in the field is that, in spite of all the advances in modern medicine, there has been no reduction in the number of babies lost in the first, second, and third day of life.

In terms of infants who survive but have suffered brain damage, a 2-year study of admissions to the Massachusetts General Hospital Children's Service has revealed that 33 percent of the admissions were for neurological conditions;

similar figures have been reported from the University of Minnesota. Masland, Sarason, and Gladwin cite the figures that of the 4,200,000 children born annually in the United States, 3 percent (126,000) will never achieve the intellect of a 12-year-old child. It has also been estimated that 0.6 percent (25,200) of the births result in children with cerebral palsy. These depressing statistics are given to emphasize the magnitude of the problem that must be solved.

It is clear that if fewer babies are to die or be injured, a new approach must be attempted. The reasoning back of the present attack is that whatever is responsible for the death or injury of a baby moments after birth must have been operating during delivery and labor and during the life in the uterus. We must study and learn more of the factors that favorably or unfavorably influence the infant before its birth. This approach has led to the study of perinatal disorders and deaths. The perinatal period begins when the fetus is 20 weeks old and continues until the infant is 28 days old. Other studies on reproductive failure include the period starting with the fertilization of the egg and continue through the 28th day of life.

The statistics on reproductive failure in the first 20 weeks of pregnancy are difficult to obtain. This is largely due to the fact that the woman does not know she is pregnant during the first 4 weeks. And after this time it is the custom in many areas not to apply for obstetrical care for several months. As private patients are known to apply for obstetrical supervision earlier than ward patients, the experience we have had with private patients gives the best evidence presently available as to the magnitude of the problem. Of every thousand women who register for private obstetric care, 100 will have spontaneous abortions or miscarriages prior to the 21st week of pregnancy, 15 will have stillbirths, and 15 liveborn babies will die in the neonatal period. The total reproductive failure for this group is 130 per 1,000.

EARLY FETAL DEVELOPMENT EMPHASIZED

There is need for more knowledge concerning the development and growth of the egg, embryo, and fetus in the first 3 months of pregnancy. This could be done by enlisting the cooperation of a large group of married couples in communities such as surround university medical centers. Weekly examination of urine specimens from the woman could detect the earliest onset of pregnancy and intensive observation could begin at this point.

The early months of pregnancy are very important since we have evidence that changes in the environment at this time may produce congenital malformation, disease, or death. Such is the case for such a mild virus disease as German measles. We would very much like to know the effect of other viral or bacterial infections on the developing embryo. We would like to know the influence of radiation, possible lack of oxygen for the embryo as associated with high-altitude air travel or maternal disease such as pneumonia or heart disease. We need to know what, if any, effect can be produced by dietary deficiencies, by poor socioeconomic factors, and by other factors at present unsuspected.

Warkany was one of the first to suggest that certain presumably hereditary congenital malformations may be simulated by malformations caused by prenatal disease. There is a need for studies to demonstrate which nervous system abnormalities are the result of hereditary factors and which are the result of environmental factors or a combination of factors.

The early embryo can react to unfavorable factors in but one of two ways—death or abnormal development. Some noxious influences that may attack the early embryo are known and many are suspected, probably many more are at present unsuspected. It is known that radiation on viral infections with either the German measles or cowpox virus (smallpox vaccination) can cause fetal abnormality or death. Future studies must discover other agents. It is now known that infections, so mild as to be unnoticed in the mother, may be devastating to the embryo or fetus. It is also known that the fetus is incapable of developing antibodies to fight disease and develop immunity and it may well be that a mild virus may produce a chronic infection in the fetus that can persist throughout pregnancy. Therefore, there is need for the long-term multidisciplined attack on the variety of problems that are encountered in the perinatal period.

One of our major problems is the attempt to prevent premature birth. The search must even include an investigation of emotional factors in the mother, since research suggests that emotions may influence both uterine and endocrine

function. Studies should be continued into the mysteries of the factors, especially endocrine, responsible for the onset of premature labor. It has been generally believed that about one-fourth of the premature labors have been associated with maternal toxemia and about one-fourth with other recognized maternal complications, but for the remainder, the etiology has been in doubt. A new lead has been discovered by Benirschke, who has found that the apparent cause of some premature labors has been a low-grade bacterial infection that may both cause uterine irritation and infiltration of the membranes leading to their premature rupture and the onset of labor.

KERNICTERUS

The central nervous system injury, especially cerebral palsy, that is associated with severe jaundice in the newborn caused by acute hemolytic disease, is now well recognized. In the Rh negative mother with an Rh positive baby and in the group O mother with a group A or B infant, the mother may have produced antibodies that can break down her infant's blood cells, causing anemia and severe jaundice. There are two types of bilirubin that produce jaundice: The indirect type is formed when the red cells are destroyed and is normally "conjugated" to direct bilirubin by passing through the liver; the direct type is soluble, easily eliminated, and its presence in the blood is not toxic. The indirect form is insoluble and combined with other factors is extremely toxic to certain brain tissues. In the presence of a high indirect bilirubin, an "exchange" transfusion can remove and dilute sufficient bilirubin to lower it to a nontoxic level. This is now accepted therapy and has prevented countless cases of mental and neurological disease such as cerebral palsy.

The more careful study of jaundiced babies has now presented a very serious situation in babies and mothers who have no demonstrable blood incompatibility. This type of jaundice is particularly a problem in premature infants where the immature liver is frequently unable to change the toxic indirect to the harmless direct bilirubin. Either the number of these severely jaundiced babies is increasing or, being alerted to the problem, more are being recognized. A number of causes for blood destruction are being discovered in addition to blood incompatibility. Vary large doses of vitamin K, one of the sulfa drugs—sulfisoxazole (gantrisin R) and various viral and bacterial infections have all been associated with large accumulations of indirect bilirubin in the infant's blood. It is now suspected that other drugs given the mother, such as tranquilizers, may also cause a high bilirubin in the baby. What is not known and what we urgently need to know is whether bilirubin of this source is equally toxic to that accompanying blood incompatibility. All the evidence to date is that it is just as toxic. We must discover, if possible, what is the specific toxic substance in bilirubin. Studies attempting to detoxify indirect bilirubin by conjugation to direct bilirubin are in progress. This is one study that all the collaborators in the perinatal project are pursuing with the hope of an early answer.

At the present time, the only treatment available for an abnormally high bilirubin is an exchange transfusion. This procedure itself carries some risk to the patient. We are still in great need of a more accurate method of determining the medical indications for performing an exchange transfusion or, better still, a more practical way of treating this condition.

THE PREMATURELY BORN INFANT

The premature infant represents but 6 to 8 percent of the births, yet they contribute two-thirds of the newborn deaths. Twenty-three percent of the premature stillbirths and 32 percent of the premature infant liveborn deaths are considered preventable. Once a premature infant is delivered, the die is cast—no significant group has ever had a mortality less than 15 percent, the vast majority higher, and in those that survive there is a much higher percentage of cerebral palsy, mental retardation, and other neurological disorders than is found in full-term births. The solution to the problem is to discover what causes premature birth and means to prevent it.

PRETEST PHASE OF THE PROJECT

Approximately 2½ years before the project officially began on January 1, 1959, NINDB was concerned with the enrollment of the 16 collaborating institutions, the enlistment and training of personnel, and the development of a

methodology. A single study design has been developed in order that all data which may have a bearing on neurological disorders will be collected and recorded in a uniform manner.

The examinations developed for the study include family health history, past medical history, physician's prenatal record, record of labor and delivery, neonatal examinations, special neonatal neurological examination, and a psychological examination of the 8-month infant.

During the past year, approximately 3,600 cases have been subjected to partial study in order to pretest the protocols and develop the techniques for data collection. Although there have been as yet no results of a statistical nature, there has been much progress reported by the various collaborators. The splendid obstetric record developed by the study has been adopted by all of the collaborators for project patients. It has been most encouraging that many hospitals have already adopted this improved form for all their patients. Also many hospitals not in the study are expected to adopt this protocol for their routine use. Practically every collaborator reports that the more careful pediatric examinations have revealed many unsuspected conditions in the newborn. This information has made possible early treatment.

Additional study facets which are being developed include a detailed study of virus infections in pregnancy, a pathological study of the placenta, new embryological studies, neuropathological studies, and following examinations at 30 months and 72 months. The collaborating institutions have been conducting a number of ancillary studies during the pretest phase and the following examples represent a cross section of such work at a few of the institutions:

Brown University.—A battery of psychological tests have been developed for the appraisal of emotional stress, maternal tension, and adjustment in the pregnant woman. To date, a considerable number of women have been tested and the findings will be correlated with subsequent prenatal, labor, delivery, and child development data. This study has revealed an interesting correlation between high "emotionality" and the incidence of complications of labor and delivery.

University of Buffalo.—The laboratory program is applying concepts and techniques of microbial biochemical genetics and inhibition analysis to the biochemical screening of mentally retarded individuals, as well as individuals with other congenital abnormalities, and normal individuals at birth and during growth and development.

Boston Lying-In Hospital.—Nearly 2,500 placentas have been studied to date and the clinical correlation with maternal and infant conditions has been recorded on 1,500 cases. Nearly 10 percent of the placental and cord examinations analyzed to date have produced evidence of intrauterine fetal bacterial infection.

Charity Hospital.—A study is being conducted on the various methodologies for collecting and analyzing dietary information from women during their pregnancy.

Columbia Presbyterian Medical Center.—Anatomopathological study of amniotic infection in 1,000 consecutive placentas is being conducted. The history of placental inflammation and its incidence are studied and these data correlated with the clinical findings in the mothers and infants. Medical hypnosis is being used on a limited basis in order to secure mothers that may go through their entire labor and delivery without any medication. The infants can then be studied biochemically and used as controls (nonmedicated) in the overall study of the acid-base balance in the newborn.

Johns Hopkins University.—To date some 2,600 blood samples have been taken at monthly intervals during pregnancy and in the infants by means of cord samples and at 4 months of age. In the event of an acute infection during pregnancy, other tests are conducted in an attempt to isolate the virus. Since about 20 percent of all premature births are associated with multiple pregnancy, twin gestation is an important cause of neonatal death and of other handicaps to the newborn which may have various deleterious sequelae. A survey of twin pregnancies over a 4-year period points out the relative incidence of twinning and incidence of monozygosity between white and nonwhite and the causes for higher neonatal mortality rate of the second twin. Some of the facts brought out in regard to the prognosis of the second twin are entirely new and have an important practical bearing on the management of the second twin.

University of Minnesota.—Since routine bilirubin determinations have been done in pretest cases at the University of Minnesota, there has been an increas-

ing awareness of the frequency of unexplained hyperbilirubinemia in the newborn period and routine bilirubin determinations are being made on all newborns.

University of Oregon.—Ancillary studies at the University of Oregon have contributed an outline of a speech developmental scale in children. Thyroxin levels in pregnant women and newborns with special emphasis on hyperthyroidism and hypothyroidism have been studied. A retrospective analysis of suspected causes of cerebral palsy within the cerebral palsied group of the Crippled Children's Division has been completed.

The Children's Hospital of Philadelphia.—One of the investigators at this hospital has been working for some years in the management of erythroblastosis fetalis and laboratory and clinical data were available on 500 children who had been treated for this condition. At this time 70 of this group have been re-examined using the protocols which will be followed after the 12th month in children included in the project.

The Pennsylvania Hospital.—Studies are being conducted on the effect of uninvestigated drugs on the bilirubin levels of newborn infants. More than 900 placentas have been examined and a correlation of the results of inflammatory changes in the placenta with complications in the infants will be carried out.

Throughout the past year, representatives from all the collaborating institutions and from many disciplines have met together many times to evaluate the protocols, discuss problem areas, and plan for the major phase of the project which we began as of January 1. The enthusiasm and cooperation of these people has been magnificent. We all believe that it is only through widespread collaboration that answers can be found to cerebral palsy, mental retardation, and many other neurological disorders growing out of the early development of life. We believe that much has already been accomplished and that you will be well pleased with the progress which we hope to make during the coming year.

NEED FOR PROGRAM

There have been several things that have happened during the past year that have again emphasized the tremendous need for this type of a program to study the etiology and prevention of congenital malformations and cerebral palsy, mental retardation, and other neurological conditions.

One of the items that has come out that has not yet been published, but is a result of a study in New York City by Dr. William Silverman, who has followed up a large number of the premature infants from his fine clinic when they had reached the age of 2 years. And to our amazement and chagrin, 25 percent of these prematurely born babies, when they have reached the age of 2 years, after careful psychological, neurological, and physical examination, were proved to have serious defects, either of a mental nature, of the nature of retardation, or of neurological disorders, such as cerebral palsy. And we also again from New York City, had a very important group, a subcommittee of the New York Academy of Medicine, a subcommittee on infant mortality, a volunteer group made up of the obstetricians, the pediatricians, the pathologists, themselves, in the New York area, and members of the New York Academy of Medicine, studying a large series of the stillborn babies in that area and also a large number of the liveborn babies who died in this area, and they discovered, in hindsight, that in reviewing the records, knowing what we know, if all of our knowledge could have been applied, 29 percent of the stillborn babies were preventable, and 41 percent of the liveborn babies that died were put in the preventable category.

Now, when this is done of the deaths, it is equally true of the babies that survive only to show the neurological damage of the type that we are trying to understand and prevent.

INSTITUTIONS INCORPORATED IN PROJECT

This project, which now incorporates 16 different institutions, medical institutions, hospitals, and universities, scattered throughout the United States, has really been on the drawing board for only about 2 years. And this is an entirely virgin territory, this attempt to try and study what happens to a young woman when she first becomes pregnant, and on through her pregnancy and delivery, in relation to the ultimate outcome of her baby, in the hope, of course, that means will be found whereby we will be able to discover the cause of injury and, hopefully, prevent it.

This project, as I say, has just been going for 2 years, and it has been a period of pilot studies and preliminary testing. No one had ever done a study of this type before. It was necessary to call in a tremendous number of medical disciplines, neurologists, pathologists, neuropathologists, pediatricians, obstetricians, people in internal medicine, social workers. The entire field of medical knowledge has been canvassed in an effort to build a protocol and a program of study that would be practical and meaningful as time went on and our information was accumulated.

RESULTS OF STUDY TO DATE

As a result of this preliminary study already some very interesting contributions to the welfare of pregnant women and their offspring have emerged.

With the help of these investigators it has been possible to provide an obstetrical record which has turned out to be so valuable and so good that for the first time a very efficient and comprehensive record of pregnancy is prepared that has been accepted by all of the 62 collaborators, and many of them have used this record not only for the patients that are in the study but have adopted it for their entire hospital personnel.

Not only has this improvement in care been reflected in the groups that are participating in this project, but it has extended to surrounding and neighboring and allied institutions caring for babies, and one of the benefits we believe will eventually arise from the project is the general acceptance of this more careful and accurate method of following a girl through her pregnancy and her delivery.

This has been extremely gratifying. And if you appreciate what rugged individualists doctors are, to get 16 different institutions to agree on a common form and protocol, which we will all fill out and send on to Bethesda for analysis—this in itself has been quite a major achievement.

CASES FOR BASIC STUDY

We have been, now, since the 1st of January, playing for keeps. We felt we had reached the point when we had trained our teams, had studied the protocol, had perfected the information that we wished to obtain, and the 1st of January of this year we actually started collecting the cases that will be the part of the basic study for which this program was originated.

Naturally, it is too early to tell or have any positive results from the studies to date, insofar as the statistical studies are concerned. As I say, it has only been begun since January. Our work prior to January involved a great many studies of a pretest nature. Nearly 4,000 such records have been analyzed and sent to Bethesda. But our present rate will contribute anywhere from 6 to 8,000 babies a year for the basic study, from which we hope to obtain this valuable information of the type that I mentioned.

While we recognize that there has been no major breakthrough insofar as the total study is concerned, because it has been going too short a time, there have been some very, very gratifying and maybe in the long run more important findings that have begun to emerge from this type of a study that will at least be equal to the benefits from the statistical analysis of our total series, namely, we have got 16 institutions in which a large number of talented, dedicated, equipped people are delving into the problems that surround pregnancy and labor and delivery and the condition of the newborn, and are beginning to study with curiosity and initiate projects and research studies that already have begun to bear fruit.

PREBIRTH INFECTION

I mentioned last time that in our particular project it had been possible to discover a method whereby we could tell whether a baby had been infected in the mother's uterus within a very few minutes of the time the baby was born. Up to this time, we have always felt that if a mother ruptured a membrane and had a delivery, and the membranes were ruptured for quite a period, infection would be secondary, because of the ruptured membranes, and the baby might be affected because of this contamination. However, recent studies have shown that this is the cart and not the horse. We now know that most of these infections probably are bloodborne, and that the amnion, or the envelope that surrounds the baby, becomes infected and weakened, and this is why it ruptures, rather than the infection being secondary. And this is a major breakthrough, because around 6 to 8 percent of all of our births in this country are premature babies, weighing only 5½ pounds, and the "premies" contribute 60 percent of our mortality. And as I mentioned earlier, the survivors contribute a very high percent of the type of condition we are trying to prevent.

So that with the knowledge of this type of infection as possible precipitating this premature labor, we are alerted to care early and in the proper way, as soon as the baby is delivered.

METHOD OF RECOGNIZING INFECTIONS

The method by which we actually recognize infection is by using established techniques and taking a frozen section of the baby's umbilical cord the moment it is born, and within a very few minutes we have a microscopic section in which we can actually see the bacteria or the white blood cells that give you evidence of infection. And with this warning, we can start appropriate antibiotic treatment.

JAUNDICED BABIES

There is another very important angle to this, and that is that the RH disease, or jaundiced babies, of which you have, I am sure, heard a great deal in the past, are a group that when the yellow pigment that causes the jaundice gets above a certain level, it damages the brain and produces cerebral palsy in these babies. And it has been discovered that by doing many replacement transfusions, you can keep the level low enough so that it does not reach the danger point. And the baby—and most of them are premature—who has this jaundice can be kept at a safe level so that brain injury does not result. We have understood the RH's, those incompatibilities, and the other group, the AB-O incompatibilities. But in recent years, largely as a result of this particular study, we are taking more and more routine chemical pains to discover the bilirubin level on babies that do not appear intensely jaundiced and have found in them a great many that are already at or above the danger point. And these babies have been in the group that are usually having this high level jaundice as a result of sepsis or infection that has started prior to birth and in the mother's uterus. And so, being alerted to the infection, starting antibiotic treatment, following the bilirubin and doing the exchange transfusion when it is indicated, a great many, we believe, unrecognized cerebral palsy injuries of the past may very well be prevented in the future.

Another very important area of research that is going on is to try and find a better method of treating the jaundice than by the exchange transfusions. And studies are going on now in this area, and there is some hope that out of this research we will find means to control this particular type of injury.

This is only one example of what is going on, and many more studies are in progress, which I have outlined in my more extended report for this committee. But I just would like to emphasize that in all of this study we have to report our findings to the central office in Bethesda, and this whole program will stand or fall depending upon the strength of the central program in the Bethesda area. We have got a very effective organization that is controlling the studies going on in the 16 institutions; but it becomes an increasingly difficult task, and it is estimated that over 4½ million forms will have been filed in this office for coding and analysis.

PLEA FOR NINDB INTRAMURAL SUPPORT

And one of the pleas that we would like to make is the same as last year, to ask the committee to see that the central corps study, the Bethesda group, gets support for the intramural studies that are being carried on in this area.

When Dr. Merritt comes to his budget studies—at least \$500,000 that is being requested we would like very much to recommend be earmarked for the intramural part of the program in Bethesda for integrating this very large undertaking that is involving so many outside institutions.

With that, Mr. Chairman, I thank you for the privilege of speaking to you today.

PREPARED STATEMENT

Senator HILL. We certainly thank you.

Your prepared statement will be placed in the record.

Of crucial importance to the whole collaborative perinatal program, are the activities of the central staff, located at the National Institutes of Health, and included as a part of the direct operations of the Institute. This is the coordinating center of the project. Its staff is responsible for the planning of meetings and conferences, the development of the protocol, the supervision of the data collection procedure, the processing of the forms, and the statistical analysis of the data. Over 30 statisticians and code clerks will be required simply for the processing of over 4½ million separate forms which will be received by this Office. In addition, laboratories must be developed for special study of pathological specimens from children dying during or after birth, and for special virus studies which are also included. Much of the technical detail must be developed through contract with special groups highly trained and with special skills. For example, the special virus antigens required will cost over \$150,000. The increasing demands on this central organization, now being felt as the program develops, require an increase of \$500,000 during 1960 for this program within the direct operations of the Institute.

SENSORY DISEASES

Senator HILL. Dr. Braley?

Dr. BRALEY. Mr. Chairman and members of the committee, it is indeed a pleasure to be back with you again and speak about the sensory diseases, the blinding diseases, and some of the hearing and speech disorders.

My main interest, of course, is in the blinding diseases, and I think I would like to start by giving you a review of what has happened during the last year.

It is estimated that approximately 80 percent of our educational processes come through the eye. And for that reason I want to emphasize that the eye is a very important area for all of our processes.

I would like to start, if I may, to discuss some of the findings of cataracts. It is estimated that about 23 percent of the blindness is produced by cataracts. There are many other disorders of interest, however.

NEW TYPES OF CATARACTS

With the development by the physicists, the nuclear physicists, and various other groups, producing different kinds of energy, we are developing new kinds of cataracts. We have known of the X-ray cataracts and the proton cataracts, and many of these in the future may be of considerable interest.

Senator HILL. Did you say we are developing them, Doctor?

Dr. BRALEY. The people who are exposed to these kinds of radiant energy develop cataracts.

Senator HILL. Something we have not had in the past?

Dr. BRALEY. That is correct, sir. And all of these produce a different kind of cataract.

Probably one of the most interesting and exciting things that has happened in the last year—

Senator HILL. Doctor, excuse me just 1 minute. I want you in one sentence to summarize what you have said for the benefit of Senator Pastore here. He is one of the most diligent and devoted members of the Joint Committee on Atomic Energy, and I want him to hear

what you have said about these cataracts and radiation. Could you just briefly state it, in a sentence?

Dr. BRALEY. We have known of the existence of the X-ray and the proton cataracts for a long time, but the physicists and the atomic physicists are developing new kinds of energy all the time. And there is no doubt that if we have the cataracts from the other kinds of energy, we probably will have cataracts from these newer energy sources, as well.

I think that kind of summarizes it.

NEW SURGICAL TECHNIQUES

This, of course, requires time to develop programs to study these processes. But the most exciting thing that we have had happen in the last year has been in the surgery of cataracts, and this is the discovery that an enzyme called alpha-chymotrypsin will dissolve or at least weaken the supporting ligaments that hold the lens or the cataract in place. This facilitates the much easier removal of these cataracts.

PROBLEMS OF GLAUCOMA

As you know glaucoma is a major blinding disease in the United States. There are over a million people in the United States who have undiscovered glaucoma and may some day be blind.

There are many problems in glaucoma, most of which have to do with the early detection of glaucoma.

We have at the present time two such studies underway. The instrumentation for the development of a detection program is underway, and undoubtedly the intraocular pressure and the observation of the eye with the gonioscope, both of which were developed by NINDB programs, will be extended. The primary cause, however, is still a mystery, and there is still additional research needed in this area.

We are attacking glaucoma from many angles—the enzymes angles, the pressure angles, and for other sources. One of these enzymes, of course, is carbonic anhydrase, which is present in the eye, and we have an inhibitor, which is called diamox, which many of you have heard of.

Even this does not eliminate the problem.

There should be, and there are, more new drugs being developed for the control of glaucoma. Glaucoma is still one of our major diseases, because it strikes at a time when an individual finally has time to sit down and read.

DISEASES OF THE RETINA

I would like to speak, also about some of the diseases of the retina.

The retina, as you know, is the film back of the eye that gives rise to the beginning of the image that will be carried back into the brain so that we can actually see. This is like the photographic film that you have in a camera, except that it must be transmitted back to the brain.

The functions of the retina are being recorded with what is called electroretinograph, which is a new recording device, recently developed, much of it accomplished by the NINDB.

COMPLICATIONS WITH DIABETES

One of our major problems is one I spoke about 2 years ago, I think. And that is the late complications of diabetes. Over 50 percent of all diabetics will sooner or later have evidence of retinal involvement; 70 to 80 percent of patients suffering from diabetes over a period of years will develop retinopathy. An alarming number of young people now, just after they have finished their college education, are blind just during the periods when they should be most productive, because of diabetes. Diabetes, with the use of insulin, continues their lives for long periods of time, but they lose their eyesight because of insufficient research in this area.

Recent research has demonstrated that it undoubtedly has something to do with the retinal capillaries. And while we have known this for a long time, considerable research is still needed here.

DETACHED RETINA

Another area where a good deal of work has been done in the past few years has been in detachment of the retina. Detachment of the retina is a kind of disease in which the retina falls away from its nutrient source, the choroid, and in this way a marked loss of vision is developed.

During the past year, due to the search of a German by the name of Myer Slingerhoff, there has been developed a light source whereby you can look into the eye, find the hole that is producing the retinal detachment, and then, by flicking on a very bright light, burn a hole in the retina and hope that you can spotweld, let us say, the retina back in place.

This light coagulation method does not require surgery.

UVEITIS

Probably one of the most unknown of all of our blinding diseases is uveitis. And considerable work has been done on this during the past year. Uveitis in general can be divided into two parts, a granulomatous uveitis, as it is called, and a nongranulomatous uveitis.

Our best description of the so-called granulomatous uveitis, which is an inflammation of the vascular coat of the eye, is illustrated by tuberculosis and by toxoplasmosis, and toxoplasmosis research has become a very important area of research, thanks to the NINDB.

However, many viruses and many functional types undoubtedly will prove of interest in the future.

Now, in the nongranulomatous group, allergy may play some role, but here the problem is widespread.

We have produced a protocol for a committee of which I am a member in developing a large collaborative study, which I hope will include about 18 institutions, in which they will carry out over 50 allergic skin tests to produce a thorough examination of the patient.

STUDY OF CROSSED EYES

One area that has shown considerable promise in the last year has been in the cross-eyed children. As you know, many of these cross-eyed children are unable to see with what is called the nonfixing eye—the eye that turns in or out. They do not learn to see with this eye. Many treatments have been used over the past in an effort to build up the vision in this so-called ambliopic eye.

In the last year, there has been considerable promise in the use of what is called pleoptics. And pleoptics is, as all of you know—you have looked at a bright light. And after you have looked at a bright light, and you look at the wall, you see a dark afterimage. Now, what we can do with pleoptics, when these children fix with an area that is not the best-sighted area—we can put a black spot in an instrument, fix that on the best seeing area, blot out all the rest of the area with a bright light, and make them use this best seeing area. This has shown considerable promise, and we have many even of older children who are doing very well.

RESEARCH IN TRACHOMA

Research in trachoma during the past year has been very important. While this is not an important disease in the United States, it is in the world. It is estimated that one-fourth of the population of the world has or has had trachoma. This is a very important worldwide disease and produces considerable blindness.

During the last 2 years, actually, there have been several isolations of the trachoma virus.

Vaccine preparations and chemotherapy will undoubtedly also help in disseminating the knowledge.

Further research in corneal transplantation has been most interesting and most productive. Corneal transplantation restores a great many people to earning power which they could not have had otherwise.

I would like to express my personal appreciation of the entire program that you gentlemen and ladies have made possible for us to do.

PROGRAM AND PROJECT SITE VISITS

I would like to give you a few examples. During the past several years that I have been associated with the program, I have made many what are called project-site and program-site visits around the country. Our specialty, ophthalmology, is comparatively unimportant in most medical schools. But the advances that we have made in the last few years have been simply tremendous.

One example I could give you, which is the worst, probably: I recently went to Puerto Rico. Three years ago I went to Puerto Rico, and I did not see how they could ever do anything. But one man was energetic enough to undertake the problem. Their eye clinic—and this I do not see how you can believe—had one man working in a very hot hole down there, seeing many patients every single day. In 1 room they would see something in the neighborhood of 50 patients a day. They would run something around several thousand patients there a year, of course.

Because of our program, because of instituting a program at this institution, they now have four residents working full time at very good facilities. They have increased the number of people that they can see in a very fine area from something in the neighborhood of 10,000 patients a year up to something near 30,000 patients. That is what their estimate is for this coming year. And these men are dedicated people. They are doing investigative work in the medical school, and so forth, which would not have been possible before. But the program has also drawn in many groups that have helped considerably. And this has happened in many places in the United States, so that our program of development is excellent.

The hearing program, I think, will come along.

WORK ON NEARSIGHTEDNESS

Senator PASTORE. Before you get to the hearing program, can I please ask you a question? Is any work being done on nearsightedness?

First of all, let me ask this preliminary question: Would you be familiar at all with the percentage of our population that are victims of nearsightedness?

Dr. BRALEY. Yes, I could give you some estimates on that. It varies throughout the country. But in our own clinic I recently made a survey, and roughly between 10 and 15 percent of about 25,000 people that we see a year are nearsighted.

Senator PASTORE. Now, is there any research being done?

Dr. BRALEY. Yes, sir; there is considerable research being done on nearsightedness, most of which has not been of too much value. There has been a recent publication from Russia, from the Filatoff Laboratories. I am not sure whether you are acquainted with this or not. They have injected salt water beneath the conjunctiva. This is a little bit like some of the other research that has been developed in the Filatoff Laboratories. This has been done before, many years ago. They thought it was helpful for nearsightedness. But our best work has actually been done in the field of genetics, where the gene for nearsightedness is probably laid down at the time of conception.

I wish we could do more. And more will be forthcoming, I think, in the near future in research in this area.

Senator PASTORE. Where is it being done in the United States in large measure, if at all?

Dr. BRALEY. Well, do you want to know the institutions?

Senator PASTORE. Yes.

Dr. BRALEY. One place is Washington University in St. Louis. Another place is the University of California. There we have done some research. There has been work done at times in the past in New York, at the New York Eye and Ear Infirmary.

Much of this research to help the nearsighted person as of today, you see, when he is nearsighted, has not been of much value.

NUMBER OF NEARSIGHTED

Senator PASTORE. The reason why I asked you the question, a very dear friend of mine who is in the medical field asked me that question,

why the Congress was not appropriating more money for research in the field of nearsightedness.

Dr. BRALEY. Yes, sir.

Senator PASTORE. Well, of course, I suffer from nearsightedness, as you possibly already know.

Dr. BRALEY. I do.

Senator PASTORE. And I was led to believe that there are quite a few in the same predicament. And he was of the opinion that not enough was being done in that particular field. Now I undersand from you that quite a bit has been done.

Dr. BRALEY. Yes, sir.

Senator PASTORE. But it is more or less of application to the people who already are afflicted with it rather than as to the causes and what brings it about.

Dr. BRALEY. That is correct.

Senator PASTORE. And you say we have not been too successful in that field.

Dr. BRALEY. No, sir.

PRESENT NEED FOR TRAINED PERSONNEL

Senator HILL. Then it seems to me the question comes, Senator: What can we do to see if we cannot be more successful? What would you suggest, Doctor?

Dr. BRALEY. The first thing I would suggest would be to train more ophthalmologists for investigative careers, and more people will be interested in nearsightedness. This is a major problem, because one of the areas that nearsighted people get is detachment of the retina, sometimes. While this is not entirely true, the figures show that some people that are nearsighted are more prone to have detachment of the retina. But the only way we can do this is to train investigators, and valid investigators, people who are able to analyze figures. And this means the training program.

Senator HILL. Well, I am not trying to give this any personal note. But it is your considered opinion that not quite enough is being done?

Dr. BRALEY. Absolutely. Not nearly enough is being done in any of our fields. Certainly myopia is like this. We can only bite off so much at a time, you see. In other words, we have attacked one of our major blinding problems. We have not yet had an opportunity, because of insufficient personnel, to attack a problem where we could give you a pair of glasses and you would be perfectly satisfied, in reality. As long as you can see even with a pair of glasses, why should we not attack our blinding problems, that are actually more important?

INCREASE IN RESEARCH ON EYE DISEASES

Dr. MERRITT. Could I say something, Senator? Before the creation of the National Institute of Neurological Diseases and Blindness, you could count on the fingers of one hand the institutions in this country that were equipped to do any research in diseases of the eye. Now this number has increased greatly since then, but it is still woefully inadequate. And there are so many problems they have to tackle that they do not have the trained men to tackle all of them. And they have been more interested in such things as you have heard

Dr. Braley mention—uveitis and glaucoma and cataracts—than they have in the problems that you and I have, of myopia. And only when we get more research men are we going to be able to tackle such a problem.

Senator PASTORE. Well, when you realize, as the doctor has brought out, that 10 to 15 percent of our population, on the average, is afflicted with it, and then I would suppose that in the causes of the military service, a lot of young men would be rejected because of it, it is a serious thing. If you lost your glasses in combat, you could actually become a tremendous hazard. And when you realize all these things, you wonder whether enough is being done or whether much more could be done. And you say in Russia they have quite an accentuated program?

Dr. BRALEY. Yes, sir.

Senator PASTORE. Much more so than we have? I do not mean to make a comparison.

Dr. BRALEY. Here, again, of course, comparisons are not easily done. In Russia they are doing more in the study of myopia than we are. We have attacked our blinding diseases researchwise, and we are neglecting, let us say, the diseases in which we can help you with a pair of glasses.

Senator SMITH. Then, Doctor, it all goes back to the basic need of training?

Dr. BRALEY. That is correct.

Senator SMITH. Then if we would start with the training and then increase our money for research, we would be making some progress, even though it might seem a little slower?

Dr. BRALEY. This seems slow, but actually every one of these boys that we are training now are coming in for research grants on any of the problems that we have.

BASIC NEED FOR DOCTORS

Senator PASTORE. Fundamentally, that brings me to a problem that is not pleasant to talk about with doctors or people in the medical profession. I remember when I first came to the Congress here it was my good fortune to be associated with our distinguished chairman of the Committee on Labor and Welfare. And I remember at that time that a bill was introduced that was already pending when I became a member of that committee that had to do with assistance to medical and graduate schools for increasing their enrollment. I think they would give \$500 per student and \$1,000 for each additional student over and above an increment of 30 percent.

In other words, they did not want to overexpand in order not to affect the standards. And that was tremendously resisted throughout the country, principally by the medical profession as such.

Now, fundamentally, when we talk about training and the need for more training, do we not basically get to the point of the need for more doctors?

Dr. BRALEY. Basically; but you have brought up a very fundamental problem, I think, too. One of the things that has been resisted in my institution, where I am allowed by my institution, by my hospital, to have six residents, what are called six residents or trainees, however you wish to call them—this is based partly on economics

and partly on the fact that these men should not be limited in their needs. But by increasing my program to 20 men—this is by a considerable increase, thanks to a training grant program—we are able not only to take care of many, many more people, but to attract men into our program that we could never have gotten otherwise.

But the basic need is in the development of physicians. We have expanded our program from approximately 90 per class up to 120 per class. But this is the limit of our facilities.

VARYING OPINIONS OF NUMBER OF DOCTORS

Dr. MERRITT. May I talk to your question? I think you will find no disagreement in the medical profession that we need more trained research workers. Where you will find disagreement is in the total number of doctors.

Now we in the medical schools feel we need more doctors. The American Medical Association will give you statistics which indicate that they do not think we need more doctors.

Senator PASTORE. Does that not present quite a paradox, though? You argue that the medical profession believes that there should be more specialization and that there ought to be more training in specialized work for doctors, but the more you attract in that sphere, the more you drain away from the practitioner. So where you inflate it on one side, you actually deflate it on the other and create two perils rather than one. I think you have got to start at scratch, and the scratch is more doctors, and when you have more doctors, they are in a wider area to attract to specialized work.

Dr. MERRITT. I agree with you, and it all adds up to the fact that we need more medical education.

PHS ESTIMATE OF NEED

Senator HILL. I might say when Surgeon General Burney, of the Public Health Service, testified a few weeks ago on this very bill, he said we are now graduating in the United States approximately 7,500 doctors. We are getting about 850 doctors from overseas. That gives us about 8,250 a year. And if we are going to anything like meet the needs of our people, we have got to increase the number of doctors we are graduating. So by 1975, we will be graduating at least 3,000 additional doctors, which means quite an increase from a graduation of 7,500, to an addition of 3,000, absolutely supporting, Senator, and sustaining, the very thought that you threw out here this morning. We have got to have more doctors. Our population is increasing all the time, as we know. And we have just got to have more doctors.

MEDICAL TRAINING IN U.S.S.R.

And in that connection, Doctor, I do not know whether you have seen the recent figures on what the Russians are doing. I realize that these comparisons are not always what they might seem on their face, because you never know how thoroughly trained their doctor is in comparison to our doctor. But they are certainly turning out in proportion to their population a good many more doctors than we are today. Is that not right?

Dr. MERRITT. They are turning out a great many more, and every one of them is supported by the Government in the process of education.

Senator HILL. In other words, if they want a man to go in and train on this shortsightedness that we have been talking about, they pick that man out and say, "This is your field." The Government trains them, educates them, and the Government offers incentives to those kinds of men.

By the way, Senator Smith is absolutely right. She suggested to me that most of their doctors are women. And the truth is that most of the doctors that they are graduating today are women.

NEGLECT OF WOMEN AS MEDICAL RESOURCE

Dr. MERRITT. Yes. We have not tapped that resource to the extent that we should.

Senator HILL. You mean our women?

Dr. MERRITT. Our own women. It was not popular for women to go into medicine 25 years ago, and it is only beginning to be popular.

Senator HILL. Well, of course, in the old days our medical schools did anything but encourage the women to go into that field.

Dr. MERRITT. Yes.

Senator HILL. I think the Women's Medical College of Pennsylvania in Philadelphia came into being because some of the older institutions—I will not call their names—just said they simply would not teach.

Dr. MERRITT. One of our most prominent ones did not take women until a few years ago.

Dr. CLIFFORD. For the record, Mr. Chairman, I do not know whether you were referring to Harvard or not, but Harvard this June is having the 10th anniversary of the first girl graduated from the Harvard Medical School.

Senator HILL. Just 10 years ago. You mean that at last they have seen the light?

Dr. CLIFFORD. They saw the light.

Senator HILL. All right, Doctor. Will you continue?

Dr. BRALEY. I had a few things I would like to say about the research in the field of hearing and speech, but I think I had better turn it over to Dr. Palmer.

PREPARED STATEMENT

Senator HILL. You wished your statement placed in the record, did you not?

Dr. BRALEY. Yes, sir; please.

(The statement referred to follows:)

STATEMENT OF DR. ALSON E. BRALEY, NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS

Mr. Chairman and members of the committee, I am Alson E. Braley, professor and head of the department of ophthalmology at the State University of Iowa Medical School. I wish to recommend the continued expansion of the research and training programs of the National Institute of Neurological Diseases and Blindness.

SENSORY DISORDERS

The number of persons affected by blinding diseases and hearing disorders is so great and the cost to the Nation for their care and rehabilitation so high, I urge your careful consideration of an appropriation sufficient to conduct necessary research on blindness and hearing defects with all possible speed.

There are over a third of a million Americans who are blind by legal definition. This includes 35,000 children and 225,000 adults over 55 years of age. It has been estimated that blindness costs the United States \$500 million a year. However, this is only a small fraction of the temporary or permanent disability resulting from eye diseases in this country. No statistical data can estimate the importance of visual function to the development and welfare of our population.

An estimated 3 million Americans are affected with major hearing and speech problems, losing between 2 and 3 million man-hours per day to industry. About 4 percent of our schoolchildren suffer hearing impairment which often includes speech complications through inability to hear speech properly.

Fortunately, we have become more aware in recent years of the scope of the problem of sensory disorders. In the few years since the creation of the Institute, significant progress has been made through research conducted both at Bethesda and through grants to leading scientists and institutions. We now know that some 50 percent of all blindness and many hearing disorders can be prevented, and this figure is increasing constantly, largely as a result of research and training efforts in this field. This progress is extremely gratifying to me. I see people every day who have lost their sight or hearing or are in the process of doing so. I know the hopeless feeling which many of these persons have since loss of sight or hearing often means loss of job, grave financial problems, and a complete emotional and social adjustment.

In addition to recent accomplishments, research has brought us to the verge of many discoveries. Some of these could make possible a completely new life for many persons.

CAUSES OF BLINDNESS

The most common causes of blindness are cataract (23 percent) and glaucoma (14 percent). The incidence of these disorders is increasing along with the longevity of our population. Also, accompanying the extension of the lives of diabetics by various new treatments, the incidence of diabetic retinopathy (7 percent) is increasing. Other important eye disorders are the infectious diseases (11 percent), injuries and poisoning (8 percent), and vascular disorders (5 percent).

CATARACTS

At the present time, there is no medical means of treating cataracts. Surgical removal of the lens, however, has been improved in recent years and continues to benefit from the advantages of better instrumentation, more effective local anesthesia, improved surgical techniques, and the availability of antibiotics.

An exciting recent advance has been the discovery that the supporting ligaments of the lens may be weakened or dissolved by the enzyme, alpha-chymotrypsin. This enzymatic zonulysis provides a method for removing the lens during surgery without the necessity of mechanically tearing the zonules, and permits the removal of the entire lens in a greater percentage of patients.

Although recent Institute studies support the general theory that metabolic activity of the lens decreases with advancing age, the disorder is not limited to aging alone. Many children contract this disorder as well.

Institute studies have also shown significant changes in the lens tissue following medium doses of irradiation. These changes usually led to cataract formations.

GLAUCOMA

Thousands become blind each year who might have been helped if glaucoma had been detected in time. Of even greater significance is the fact that there are an estimated 1 million or more persons with undiscovered glaucoma. It is now clear that almost all instances of the pressure elevation that characterizes glaucoma result from an obstruction to the outflow of aqueous humor from the eye. Persistently elevated intraocular pressure damages the optic nerve and slowly destroys vision.

Better methods are now available for the clinical determination with the tonograph and observation with gonioscope of this obstruction. In addition, im-

proved instrumentation and calibration permit more accurate estimates of the intraocular pressure itself. However, the nature of the obstructive process responsible for chronic simple glaucoma remains unknown.

Newer and more potent drugs are available for the alleviation of the outflow disorder. Carbonic anhydrase inhibitors partially suppress the formation of aqueous humor. In addition to their practical value, these inhibitors have proved of value in the experimental study of aqueous humor formation. The most productive approaches to understanding the mechanisms of the outflow problem, as well as the rate of aqueous humor formation, appear to include electron microscopy, enzymatic histochemistry, and the use of analog computers for the analysis of turnover data.

Plans for the collaborative study of glaucoma are being developed by the Institute in conjunction with the Division of Special Health Services, chronic disease program of the Bureau of State Services, Public Health Service, and four research institutions interested in working in this field. The study will evaluate glaucoma detection and diagnostic procedures.

THE RETINA

The retina is the sensory end organ of the visual process. Recent research has provided considerable information as to the structure, chemistry, and function of the visual cells. Electron microscopy has demonstrated the nature of the rods and cones. The role of vitamin A in addition to specific enzymatic processes in the visual cell have been elucidated.

In addition to conventional functional methods of testing, the recording of the electrical response to light, electroretinogram, provides useful information as to the state of function of the retina.

The retina, as other organs, is dependent upon an adequate blood supply. Many of the blinding retinal disease processes result from alterations in its vascular supply. The common vascular retinopathies are associated with prematurity, diabetes, atherosclerosis, and hypertension.

The retinopathy of diabetes is a late complication of this metabolic disorder. Unfortunately, its incidence is increasing remarkably. At the present time, over 50 percent of all diabetics have some evidence of retinal involvement. Recent research efforts have increased understanding of the capillary aneurysm which characterizes diabetic retinopathy. However, little is known about the alterations in the capillaries which result in this abnormality. Better methods for the experimental production of this retinal disorder would offer an excellent research tool for the study of this disease process.

As a result of the experimentally observed effects of nitrogen mustards on the immature developing retina in the fetus, the malignant retinal tumor, retinoblastoma, can now be treated more effectively by combinations of X irradiation and the systemic administration of nitrogen mustards.

At the present time, most retinal detachments can be successfully reattached. It has been established that "breaks" or holes in the retina are the cause of its separation from its nutritive supply. A new method of sealing retinal breaks has been devised utilizing an intense light source as a means of producing a burn at its point of focus. Thus, either by condensing the rays of the sun or an artificial light source, the retina can be burned and sufficient scarring produced to seal it to the underlying choroid. This method of light coagulation has also proved promising in the treatment of choroidal retinal tumors and some inflammatory diseases, and is being explored experimentally in a number of other conditions.

UVEITIS AND INFECTIOUS EYE DISEASES

A part of the inflammatory process of uveitis has responded well to steroid therapy. However, a large amount of uveitis results from the presence of organisms within the eye. The causative agents are difficult to discover and biopsy can rarely be done. It has been proved that toxoplasmosis and tuberculosis are causative agents in some instances of uveitis. Antibiotics, anti-tuberculous therapy, and agents effective against toxoplasma offer promise in isolated instances, but the majority of patients suffering from uveitis are benefited little by these drugs. The application of fluorescent antibody techniques may provide the key to part of this perplexing problem.

The identification of the viral agents of adenoviral infections including epidemic keratoconjunctivitis has defined these diseases more discretely and offered hope for their cure and prevention. The recently reported isolation of the

trachoma virus provides opportunities for vaccine preparation as well as chemotherapy.

A collaborative project, in which the Institute acts as coordinating agency for a number of non-Federal research facilities is now underway to investigate the incidence, causes, and treatment of uveitis.

Also, in Alaska, a joint program with the Arctic Health Research Center and the Alaska Native Health Service is studying factors which may be responsible for the fact that in this region phlyctenular keratoconjunctivitis causes corneal scarring in 40 to 50 percent of the population.

THE CORNEA

The transplantation of a clear healthy cornea from a donor eye to replace an opacified diseased cornea offers opportunities for restoration of vision. The improvement of surgical techniques, the development of better needles and sutures, and the increased availability of donor eyes have accounted for an increasing number of successful corneal transplants.

The experimental demonstration of the possibility of dehydrating and preserving corneal tissue so that it may be stored and used for subsequent transplants offers the potential opportunity for treating patients with diseased corneas in many parts of the world where fresh donor material is not available.

From the practical point of view, advances have been most substantial in the therapy of corneal diseases. Infections may be treated successfully with a wide variety of antibiotics and now result in less visual loss in this country. Many hypersensitivity reactions are alleviated by steroid therapy. Unfortunately, such therapies are not cure-alls or free of complications. For example, they appear to potentiate the corneal infections produced by certain fungi and viruses (e.g. herpes simplex). There is a great need for fundamental research on the nature of this potentiation of both ocular and systemic fungal and viral diseases.

HEARING AND SPEECH RESEARCH

As I reported last year, the Institute's research program on hearing and speech at the Bethesda laboratories has been limited to basic research in neuroanatomy and neurophysiology. However, from this basic work, new concepts of brain-centered hearing control have the widest implications for future application to patients.

The increase of grant demand for hearing research by over 100 percent since 1958 indicates the scientific interest arising in an area too long neglected. It would be unfortunate to curb this research interest for even a year.

Progress in basic research on the nerve pathway by which the brain itself controls the sensitivity of hearing is being investigated. Certain forms of deafness are known to be hereditary, and special strains of mice are furnishing valuable clues on hereditary deafness.

Through the Institute's collaborative project on childhood disorders, refined methods of testing have been established for virus infections during pregnancy which may account for some congenital deafness.

Also, as an outgrowth of the collaborative project, a language function test for children at 2½ years of age has been recommended. An examination at this age may recognize basic defects more clearly than at a later age when the child has developed adaptive mechanisms, secondary reactions, and inhibitions as a result of training and experience.

Grant-supported research in the hearing field covers a wide range of research projects. These include studies of the circulation of the inner ear, electrophysiological studies of the entire auditory system, otosclerosis, the cumulative effect of excessive noise, sound transmission, animal audiometry, and pitch judgment.

Research on defective speech includes studies on defects arising from cleft palate, excessive noise, sound transmission, animal audiometry, and pitch judgment. Also, coordination of mouth and pharynx, stuttering, pathologic aspects of aphasia, speech behavior in cerebral palsy, and the effect of endocrines on the larynx.

Recently, a new laboratory for studying the physiology of hearing was established at MIT and will be operated under grants from NIH. Doctors, neurophysiologists, and electrical engineers will work together in a program of research, treatment, and education which, it is hoped, will contribute to the understanding of the basic phenomena of hearing and help solve some of the problems of deafness.

There is an urgent need for more information concerning hearing and speech. The present research, for the most part, has been carried out in a few institutions and has been restricted principally because of the lack of trained personnel and funds to support even the personnel at hand. However, much improvement has been evident since the reassessment of the teaching program in otolaryngology within the medical centers.

This program, initiated by the NINDB, has caused a reorientation of the teaching program so that a number of medical school training programs are now being slowly pointed toward turning out investigators as well as physicians.

TRAINING PROGRAMS

In addition to the research in the specific sensory disease categories which I have just outlined for you, the NINDB, during the past 3 or 4 years, has emphasized and given high priority to the training of postdoctorate scientists in basic, clinical, and applied research in the visual and hearing fields. As a result, a large number of competent, well-trained investigators are just beginning to add their skills to eye research. Biologists, physiologists, and biochemists are being encouraged to continue study of the eye and ear from a basic science viewpoint. Now that these young scientists are entering the field, it is important to enable them financially to remain in their field of choice.

It is hoped that these individuals will be able not only to devote a considerable part of their time to research in the blinding and hearing disorders, but also will be able to accumulate about them basic research personnel as well as other research-minded ophthalmologists and otologists to form teams for the study, elucidation, cure, and prevention of the diseases that are robbing so many Americans of their vision and hearing.

I therefore, urge you to support the budget of the citizens' committee and its recommendations as submitted by Dr. Merritt.

DEFINITION OF LOGOPEDICS

Dr. MERRITT. For the benefit of those of you who do not know the meaning of this new specialty, it comes from the Greek "logos," meaning "word," and it has to do with speech.

Dr. PALMER. Mr. Chairman and members of the committee, it is quite appropriate that I should speak last in this group, because—

WORK IN FIELD OF HEARING

Senator HILL. Excuse me one moment. Before you start, Doctor, I want to ask Dr. Braley this; and maybe you will address yourself to this. That is the matter of hearing. It seems to me we have done so little in the field of hearing. Is that not true?

Dr. BRALEY. That is true. But so little of it has been in research. Most of it has been in the area of rehabilitation. The research area is the part that I wanted to speak to. And it is in the statement I submit, sir.

Senator HILL. It is in your statement?

Dr. BRALEY. It is all in the statement. But at the present time, so far as research in the hearings area is concerned—and this is a very important area, because, as you know, there are a great many people with hearing defects—there has been a program of conferences held, and I feel while the pace has been very slow, some progress has certainly been made in the last year. But I feel that considerable progress will be made in the next 5 years. There has been, of course, a good deal of progress made in the past year.

I do not know whether you remember, but I brought last year this French worker. Do you remember? He implanted that little coil in there, and had a big induction coil on the outside?

Senator HILL. Yes.

Dr. BRALEY. He has done that now to a couple more patients, and apparently, as I get it—I receive this information mostly from hearsay, because he has only published one other paper since that time—it still looks quite promising; although many people have to learn to interpret the sounds that they receive. But research in this area, of course, is extremely important.

DIFFICULTY IN RECRUITING PERSONNEL

Senator HILL. In that connection, I think it was 2 years ago when Dr. Bailey, who is head, as you gentlemen know, of the Neurological and Blindness Institute—I asked him about this matter of research in hearing. And at that time his answer was that it is difficult to get men to go into research in hearing.

Dr. BRALEY. It was impossible. As a matter of fact, this was an area in which many of the medical schools had closed their departments. I can give you examples where they just did not have any. And it is simply fantastic, even from the small amount that has been investigated in this area, what has happened in just the last 2 years. I wish I could have given you some illustrations about that, because I have seen some of these programs developed, too.

EXPENDITURES FOR HEARING AIDS

Senator PASTORE. Has anyone ever compiled figures on what amount is spent on hearing aids alone in the country? It might be interesting to know that.

Dr. BRALEY. It would be. At least some of it I think is in last year's testimony. I have forgotten whether it is last year's or the year before.

Dr. PALMER. From hearsay, Mr. Chairman, it is around \$35 million a year, being invested by the public in buying hearing aids.

Senator HILL. In buying hearing aids, alone?

Dr. PALMER. Yes.

Senator HILL. And how much money is going into medical research in hearing?

Dr. MERRITT. A fraction of that.

Senator HILL. Just a fraction of that \$35 million?

Dr. BRALEY. A very small fraction.

Senator HILL. All right, Doctor.

SPEECH DISORDERS

Dr. PALMER. Mr. Chairman, I represent the area of speech and hearing disorders as a rehabilitative worker in this field, and the remarks of the witnesses preceding me lead very naturally into what I have to say, because our work constitutes that work which has to be done in the followup of doing something about the distressing conditions which still exist after medicine has been unable to salvage these cases and they must be taken care of one way or another.

We heard this morning about cerebral arteriosclerosis, in which one of the major distressing conditions is the lack of communication, the destruction of speech, and so forth, in which something must be done if these people are to return to any vocational usefulness. We are all

very hopeful that the magnificent progress which has been made by the Institute of Neurological Diseases and Blindness will continue and that those of us in the rehabilitation field may look forward some day to not having anything to do. But in the meantime, we do have these people who have had these conditions for which something must be done.

SPEECH DISORDERS PREVENTABLE WASTE

The disorders of speech and hearing constitute a tragic and frequently preventable economical wastage in our whole socioeconomic structure. Among them are the problems of cerebral palsy, losses of hearing in children and adults, the aphasia which occurs in cerebral arteriosclerosis frequently, stuttering, cleft palates, mental retardation, and so forth. It was not until 1930 that any real recognition was taken of these disorders, when the White House Conference of that year made some efforts to develop some estimates of their prevalence. The reason for this long neglect is the general prevalent neglect from the idea that if you have disordered speech something must be wrong with your mind. Nothing could be further from the truth.

GROWTH IN REHABILITATION PROGRAMS

In 1934, rehabilitation programs for these distressing handicaps were limited to a few services for minor defects in some public school systems, and experimental research clinics in connection with some of the larger universities. There were no professional standards. An interested person might go to a university, take one course, and start to learn how by his own tragic errors with the troubled people who came to see him. The American Speech and Hearing Association, the only professional national organization in the field, in 1934 had 87 members. In October 1958 the secretary reported 4,767 members. Such growth must reflect a real public need.

LEVELS OF TRAINING IN ASSOCIATION

The association is comprised of two sorts of persons; those interested in speech disorders, as such, and those interested in disorders of hearing. In these two fields two levels of competence are recognized: Basic and advanced. Only those who have completed their studies and have had a certain amount of experience are entitled to the advanced certification. These are the only persons recognized by the association as being unrestrictedly capable of teaching others, working as heads of clinics, et cetera. In October 1958 449 individuals held the advanced certification in speech, and 81 in the advanced certification in hearing.

Persons holding the lower levels of training are essentially technicians. This category was established to meet the pressing demand for some sort of help.

How far this growth is from being satisfactory, phenomenal as it may be, is illustrated by the following: In January 1956 the U.S. Office of Defense Mobilization, Subcommittee on Paramedical Specialties, reported 4,000 speech and hearing specialists were available. However, 16,000 was the immediate need. When it is noted that of the 4,767 specialists available today, only slightly over 11 percent are fully qualified, the need for Federal assistance should be fully apparent.

REASON FOR CONCERN IN COMMUNICATION DISABILITIES

Why this concern with disabilities in communication? There are a number of reasons:

First, the person with a speech or hearing handicap is a solitary prisoner in a speaking world. He is an isolate, an ostracized person. The emotional and psychological leverages upon his personality are tremendous. Speech and hearing disorders are never fatal. We have seen some 21,000 of them at our clinic, and I can assure you that for many of the children and adults, and for their families, the condition was life in death.

Second, this group constitutes a serious economic drag upon society. I can illustrate this by two factual examples: In cerebral palsy practically every severe case has tremendous difficulty in communication. Until recently the only State residential institution for them were the institutions for the mentally defective. The cost in the better institutions is a minimum of \$750 per year per capita. They live as long as anyone else when decently cared for. A 10-year-old child will cost the taxpayer \$45,000 during his 60 years, without the taxpayer having any choice in the matter. We have never spent this much money on any cerebral palsied child. Yet we have from our clinic in the past 25 years produced a college professor, a judge, many skilled union workers.

Take the problem of stuttering, which is interesting in itself; many years ago the economic consequences of stuttering were well studied. This prevalent condition, occurring in one out of a hundred persons, and three times as often in the male as in the female reduces the average earning power of the individual 35 percent. Let the stutterer be capable enough without stuttering to manage a living—with his tragic handicap he will swell the unemployment compensation lines.

Perhaps in prosperous times these arguments are unimpressive. To me, they show the imperatively enlightened self-interest of a society that looks after them.

Third, this group constitutes a serious social weakness in times of great national stress. This was recognized in Hitlerian Germany where most of these cases were destroyed on the pretext that they evidenced deteriorating racial stock. But they were recognized as a weakness. Modern warfare, modern industry, modern life increasingly depend on communication, and communicative skills. The loss of manpower in these endeavors from hearing disabilities alone is inconceivably great. This Nation must face the fact that in these modern troubled times of war it is outnumbered. Every life counts. We cannot neglect the rehabilitation of our handicapped persons.

LARGEST HANDICAPPED GROUP

Fourth, when all of the varieties of speech and hearing disorders are gathered together, they unquestionably form the largest handicapped group in our society today. We have surveyed in the Middle West and elsewhere several hundred thousand of the population in a large number of survey research studies. The reason the large number is not generally known is that, with the exception of those few crippling conditions producing speech disorders such as cerebral palsy and aphasia, the troubled emotions of a person locked in silence

do not speak when you pass him on the street. We have alluded to the incidence of stuttering as 1 percent. This is already frightening enough. But when one adds to this the obvious example that nearly all those present today will lose a small part to nearly all of their hearing, and that literally hordes of our children already have such losses, the figures become believable. In short, when one adds the cleft palates, the cerebral palsied cases, the deaf and hard of hearing, the adults and children with aphasia, the stutterers, the losses of voice due to cancer, et cetera—all of these conditions being within the distinct possibility of some help—an estimate of 5 to 7 percent is not unreasonable. We have, therefore, an overwhelming problem from the viewpoint of simple humanitarian decency, from the self-interests of economics and strength of society, and numbers.

SOLUTION FOR PROBLEM

What is the solution? I think it is lucidly clear that the efforts of private clinics, local communities, and States will not be enough. To some extent, the Federal Government has already recognized the problem, and we now have funds being expended, but in limited amounts, by various offices in the Department of Health, Education, and Welfare—among these the Office of Education, Vocational Rehabilitation, the Children's Bureau, and the National Institutes of Health.

Any problem as broad as this one must be attacked in a systematic, organized manner. Three areas must be integratively supported: (1) professional training—we heard a great deal about this this morning; (2) clinical services; (3) research. The close relationships of these three facets are apparent. Research must provide the knowledge that professional training can impart to the experts who will meet the clinical emergencies.

PRESENT SITUATION

I can sketch the present situation as follows: In the past 25 years there has been an increasing awareness of the problem by the professional and lay public. To meet this awareness, clearly defined national professional standards have been established. Research and professional training are being carried out at many colleges and universities.

According to the Office of Education, about 200 colleges and universities offer some sort of professional training in this field, while not more than 30 give programs leading to the doctoral level.

Clinical facilities are relatively sparse. Colleges and universities generally feel that they cannot undertake larger clinical programs than can be justified on the basis of the college students who must be trained. The public schools in general specialize in the less severe cases, although changes are being made. Research, while it has accumulated during the past 25 years at a rapid rate, is still largely the result of masters' and doctors' theses which can be excellent, of course, but must necessarily be small and exploratory only in nature.

There are many potential solutions to these problems which could be developed effectively and feasibly through financial support from the various offices of the Department of Health, Education, and Wel-

fare. Among these are the stimulation of the existing large rehabilitation centers, the creation of new regional centers, expansion of the training grants and workshop programs of the Office of Vocational Rehabilitation, and generalized institutional support for research on longtime grants.

APPROPRIATIONS FOR INDAB

In regard to the appropriation for the Institute of Neurological Diseases and Blindness, those neurological diseases in which irreparable damage occurs to the brain and upper spinal cord are notorious for their crippling effects upon the speech and hearing of humans. The excellent studies now being conducted by the Institute on the cause and prevention of these disorders, and their general medical treatment, will eventually reduce the prevalence of these economically disastrous and tragic conditions. Among those disorders are many that directly affect the communicative processes, such as cerebral palsy, adult hemiplegia, and aphasia, childhood aplasic disorders, a whole host of progressive deteriorating illnesses such as hepatolenticular disease, the congenital progressive cerebellar ataxias, certain of the muscular dystrophies, various diseases leading to blindness, mental retardation, and so forth.

Prevention cannot come too soon, but in the meantime it is in our own enlightened self-interest that the best methods of rehabilitation be sought for those presently afflicted.

NEED FOR RESEARCH IN REHABILITATION

The problems of cerebral palsy may be taken as illustrative of the need for extensive research in rehabilitation. Nearly all of the cases with any severe degree of involvement have losses in speech, and perhaps one-fourth have serious impairments of hearing. The estimates of visual difficulties run as high as 50 percent of the cases. Take a helpless case of cerebral palsy, 7 years old, unable to sit up, dress, feed himself, or talk. It is obvious that rehabilitation will produce many economic dividends for society. And the most essential part of that rehabilitation is to develop his communication so that he may be able to make known his wants, to get an education. Without communication he remains helpless and dependent.

The past 25 years have seen the development of rehabilitative techniques to the point where we know that adequate research and investigation will cut down the time required from expert personnel, and increase the amount of communicative efficiency. When one sees a probate judge, a college professor, a research psychologist grow from a childhood such as this, it must be admitted that research funds spent on rehabilitation are a wise investment. The best hedge against inflation is a producing economy, and the best hedge against depression is a consuming economy. Rehabilitation of these problems develops producers and consumers both.

Much the same can be said of the adult hemiplegics who have lost their communication as the result of some arterial disease or accident. And certainly this holds true of aphasic children, many of whom are born with similar conditions.

What is being said here is that we are now skillful enough to produce many gains in these conditions, but more important, we are aware of many gaps in our knowledge of how the damaged brain functions in communication.

What is needed is the encouragement of research in the fields of speech and hearing disorders particularly as they relate to neurological disabilities.

The problem is immediate and compelling. The magnitude of the numbers of persons so handicapped, and the comparative lack of adequate research are clear evidence that broad support should be placed behind this area of investigation. Long experience shows that such research will produce many dividends in lessened rehabilitative costs, of greater amounts of improvement in individual cases, and consequently larger numbers being served by the personnel and funds available.

FUNDS EARMARKED FOR SPEECH AND HEARING

Within the framework of the appropriation for the fiscal year of 1960, of the Institute of Neurological Diseases and Blindness, I should like to recommend that \$1 million be set aside by the Congress for research in speech and hearing rehabilitation.

This is a national problem, and a proper one for the Federal Government. If these funds are made available it may be that some day all of the people, including those with mental retardation, neurological diseases, and blindness may have real and equal privileges. Research in rehabilitation of communicative disorders offers hope that these silent citizens may be able some day to avoid the discrimination of custodial institutional care, and the tragedy of economic and social deprivation.

Thank you, Mr. Chairman.

Senator HILL. Thank you, Doctor.

Dr. Merritt, in speaking of Parkinson's disease, you spoke of the effect of tranquilizers.

Dr. MERRITT. Yes.

EFFECT OF BARBITURATES IN PARKINSON'S DISEASE

Senator HILL. What would you say of the effect of barbiturates?

Dr. MERRITT. Barbiturates will produce a condition somewhat similar but not quite as severe as the tranquilizers. But this is tranquilizers in very large doses, and it disappears when the need for tranquilizers has disappeared, and the tranquilizers are withdrawn.

It was just used as an illustration that some substances can cause this, and there must be some other substance that is causing it in the patients that get the disease. And so therefore it is an approachable disease and should be cured.

Senator PASTORE. I should like to direct a question to Dr. Palmer.

As I understand your presentation, Doctor, you are emphasizing not so much research with reference to the cause and the cure, but you are actually emphasizing here that once the disease has taken hold and caused this hard of hearing or deficiency in speech, you should like to conduct research as to rehabilitation.

POSSIBILITIES OF REHABILITATION

Dr. PALMER. That is correct. We believe that we can reclaim a number of these victims of these conditions and also improve the results we are presently getting in the work we are now doing.

Senator PASTORE. Well, now, it was always my impression that quite a bit was being done in that field. I understand from you that such is not the case.

Dr. PALMER. There are a number of rehabilitation clinics going on, but they are far from meeting the demand on them made by the people who are suffering these conditions. That is one problem. If we could have adequate research and rehabilitation and cut down the time, as has already happened in private work, we believe that the existing centers could do a great deal more work than they are presently doing, much better work, and the problem is very similar to that that has already been expressed. More trained people are needed. More research in the mental degree of rehabilitation is very urgently needed.

Senator PASTORE. I notice you mentioned a sum of money. How would you distribute the money, or spend it, Doctor?

Dr. PALMER. I think that would be up to the Institute of Neurological Diseases. I would suggest that some training grants be set aside, some institutional support, and some training grants for research be allocated.

WORK IN SCHOOLS

Senator PASTORE. To your knowledge, is there a program generally speaking in our school system whereby young people are examined as to whether or not they can see the board clearly and whether or not they can hear the teacher and give her instructions? Do you think we are doing enough in our schools to meet that demand?

Dr. PALMER. Senator, the schools are badly overloaded. Most of the better school systems of America, however, do provide screening services in vision and in hearing, sometimes conducted by the school nurse and sometimes by specialists called in to the school systems. And this is very helpful, where the programs are run, because then these children can be referred to physicians, and if treatment is possible, treatment can be given.

Senator HILL. You have brought us very interesting testimony. I have had quite a bit of association with Dr. Howard Rusk. I am sure you know him quite well and have collaborated with him, and I have seen some of his work at the New York Bellevue Rehabilitation Center. But as you have so well said in answer to Senator Pastore, we just do not have enough of those centers. There are so few, relatively speaking. Is that not correct?

Dr. PALMER. That is correct, Mr. Chairman. There are not enough such centers.

EMPLOYMENT OF DISABLED

Senator HILL. And if I may say this, we had a rehabilitation conference of representatives from Southeastern States in my home city of Montgomery, Ala., last fall, and we had a luncheon meeting, at which a representative of the Hughes Aircraft Corp. was, we thought, to be the principal speaker. Instead of speaking, he brought a movie,

showing the disabled people who are now employed in the plant, and the remarkable things that are being done by these people, just showing what can be done to rehabilitate these people, to give them the opportunity to lead useful lives for themselves, and also to make their contributions to the economic and cultural welfare of the Nation.

It was a most challenging thing to see that picture. I remember a poor fellow there that had no arms. He could not hold a sheet of paper. But as God so often does, where a person is denied one faculty, he increases the strength, so to speak, and the capacity, of the other faculties. So this man had a brilliant mind. He could not hold a paper. But a young lady could come there and hold a paper in front of him, and he would give you a rapid calculation of some kind, and perhaps most of the people who had both arms could not give it to you in anything like the time he did, or perhaps none at all. But it was a wonderful illustration of what we can do, just what you have been talking about here this morning, Doctor.

Now, Dr. Merritt, you had something to present.

BUDGET REQUESTED

Dr. MERRITT. I just wanted to present the budget. I do not think I need to present it in detail, taking up the committee's time. It is all given here. And I think we have given you justification for the increases.

The budget committee of the citizens when they met recommended a total of \$45 million. Since then, we have decided that other needs would increase that \$3,900,000, making the budget \$48 million.

The sum of \$11,745,000 would go to research projects, and I may say that we would have overexpended the amount of money we had for research projects last year if we had been able to pay all of the approved grants.

Senator HILL. You mean you had more applications than you had funds with which to meet these applications?

Dr. MERRITT. That is right. And with the commitments we have for the next year, with our present budget, we would be practically able to take on no new projects. And we need extra money for new projects and for initiating new programs.

We are asking for no increase in the research fellowships. We are asking for an increase of \$2,725,000 in the training programs. And I think that justification for this increase has been given you by everyone who has testified, that our crying need is to get more research workers into fields, so that they can not only study glaucoma but they can study myopia.

Senator HILL. You mean shortsightedness?

Dr. MERRITT. Yes, shortsightedness.

Senator HILL. You notice I have my glasses on, Doctor.

Dr. MERRITT. Yes. So have I. And shortsightedness may be the defect that has not enabled us to get ahead with the research; mental shortsightedness.

Then we are asking for an increase in the direct operations of the National Institute, which is the outstanding Institute in the world and is taking such a leadership in the fight against the neurological diseases and sensory disorders. We are particularly asking that \$500,000 of that be earmarked for the intramural part of the perinatal

project, in order to correlate the projects that are going on and to initiate projects at the Institute where specimens will be sent, particularly the brain specimens, for the pathologists to study, and for serological studies, and the like.

We feel that although this is a sizable increase, it is the minimum that we would need, and we have greatly appreciated your support and the support of your committee in the past, and we know that our pleas are given to sympathetic ears.

Senator HILL. Doctor, we want to thank you and Dr. Braley and all of you gentlemen here this morning, Dr. Clifford, and Dr. Palmer, for this very fine presentation.

I have but one regret. I wish every Member of Congress could have been here this morning with us, Senator Pastore, and heard this very informative and challenging testimony.

We know you are busy men. Some of you have come from afar. And we deeply appreciate the fine, constructive help that you have given this committee.

We thank you very, very much.

Dr. MERRITT. We are not nearly as busy as you are, and we certainly appreciate your willingness to hear our testimony.

Senator HILL. Thank you, Doctor.

We had hoped this morning to hear from Mr. Winslow Carlton and C. Harris Pett on the question of juvenile delinquency. It is nearly 1 o'clock. I wonder if those witnesses could be here at 2.

Could you be here this afternoon at 2 o'clock? Would that be agreeable to you, sir? All right.

(Whereupon, at 12:50 p.m., the committee recessed, to reconvene at 2 p.m., the same day.)

AFTERNOON SESSION (TUESDAY, MAY 26, 1959)

Senator HILL. The committee will kindly come to order.

Mr. Winslow Carlton and Dr. Harris Peck, would you come around here and have seats?

Mr. CARLTON. Thank you, Mr. Chairman. I am Winslow Carlton.

Senator HILL. Mr. Carlton.

STATEMENT OF WINSLOW CARLTON, CHAIRMAN, BOARD OF TRUSTEES, MOBILIZATION FOR YOUTH, PRESIDENT, HENRY STREET SETTLEMENT HOUSE, NEW YORK, N.Y.

PREPARED STATEMENT

Mr. CARLTON. I would like to take this opportunity, sir, to express my appreciation for being given time.

Senator HILL. Thank you, sir. We are glad to have you here, sir. You have a prepared statement, do you?

Mr. CARLTON. I do, sir.

Senator HILL. All right, sir.

Mr. CARLTON. And I think that is being handed in.

Senator HILL. All right. Fine.

Mr. CARLTON. In the interest of time, sir, and let me repeat, we greatly appreciate you giving us this opportunity, rather than read this statement, if I could pull out some of the highlights.

Senator HILL. We will put the statement in the record in full and then you make any other further statement you see fit, Mr. Carlton.

Mr. CARLTON. Thank you very much, sir.

Senator HILL. Thank you, sir.

(The statement referred to follows:)

A PLAN FOR AN ALL-OUT DEMONSTRATION ATTACK ON JUVENILE DELINQUENCY AND YOUTHFUL CRIME IN URBAN AREAS

(By Winslow Carlton, New York, N.Y., chairman, board of trustees, Mobilization for Youth, president, Henry Street Settlement House, 265 Henry Street, New York, N.Y.)

Mr. Chairman and members of the committee, I would like to take this opportunity to express my appreciation for being given time to discuss with you what is considered by many as one of the major problems facing our Nation today, namely, crime and delinquency among our children and young people.

I come to you with a very real sense of urgency. I have the privilege of participating in two social agencies operating in a congested, fermenting, high delinquency area of New York—the lower east side of Manhattan. From this experience I am keenly aware of the increasing problems among children and young people in that neighborhood—gang wars fought by teenagers with lethal weapons, an alarming increase in the use of narcotics, a rise in intergroup tensions, as well as a sharp increase in crimes of violence against both persons and property.

In reporting on this situation to you, Mr. Chairman, I am not, as a resident and voter of New York City, washing the city's dirty linen in the Nation's Capital. Considering its fiscal limitations, our city administration has been vigorous and imaginative beyond most municipalities. And this is equally true of the voluntary and citizens' organizations on the lower east side itself. I venture to bring this to your attention because what we observe in our section of New York City is, I believe, representative of a situation that is widespread through the country, a pattern of increased juvenile delinquency and youthful crime in smaller communities as well as in the large centers of population.

In an article in the March 1959 issue of the *Annals of the American Academy of Political and Social Sciences*, entitled "Delinquency Prevention: The Size of the Problem," I. Richard Perlman, Chief of Juvenile Delinquency Statistics of the Children's Bureau, says, "The number of juvenile delinquency court cases reported to the Children's Bureau began to increase after 1948 and have continued to rise for 9 consecutive years. They more than doubled between 1948 and 1957. In 1957, more than 600,000 cases were referred to juvenile courts. These involved an estimated half a million different children or about 2.3 percent of all children in the vulnerable age group—10 through 17—in the United States. This percentage represents the proportion of children involved in court delinquency cases in 1 year—1957—and it is frequently cited to show the size of the delinquency problem. A much better idea of the size of the problem can be gained by estimating the percentage of all children who will become involved in at least one court delinquency case during their adolescence. Generally this covers an 8-year period, from 10 through 17 years of age. Allowing for repeaters who are involved in about one-third of all delinquency cases, this percentage is roughly estimated to be as high as 12 percent if the 1957 rate continues. Considering boys alone, it would be much higher, roughly 20 percent."

It should be emphasized that Mr. Perlman's statistics relate solely to the children who are brought into court. Every fieldworker knows that the actual rate of delinquency is far higher than this, as Mr. Perlman points out. He likens the situation to an iceberg, all that can be reported being "that portion * * * which shows above the waterline."

I submit, gentlemen, that we are in the presence of an epidemic, a disease of society. It must be treated as we have learned to treat germ-created environmental and infectious diseases. This means that we must deal with the individual cases as they arise and at the same time search out the root causes in order to prevent the spread of infection and wipe out its sources.

Thus far we have not attacked youth crime and delinquency on anything like the scale that is indicated by the facts. In no community in the United States have we ever mounted a total, all-out attack on the problem. All that we have at the present time are fragments of what might be an adequate program.

Furthermore, these fragments have for the most part lacked adequate evaluation of their effectiveness. We are almost completely without the kind of social science research that is needed to appraise our present methods and to develop new and more effective ways for preventing and controlling delinquent behavior among our young people.

In 1954, Dr. Martha M. Eliot, then Chief of the Children's Bureau and now professor of public health at Harvard, wrote, "If we are to meet this problem of juvenile delinquency and solve it we must have the benefit of many more studies, carefully conceived and conducted, than we now have on which to base both preventive and remedial action."

Unhappily, we have not made much progress over the last 5 years. As recently as March of this year, Dr. Helen L. Witmer, Director of the Division of Research of the Children's Bureau, wrote, "Few (delinquency) programs, relatively speaking, have been evaluated and most of these not adequately."

Against this background, I would like, Mr. Chairman, to present for the information of your committee a plan that we are in the process of implementing in our community known as Mobilization for Youth. This project was initially sponsored by the Henry Street Settlement. It now has its own board of trustees composed of representatives from the six settlement houses on the lower East Side, namely: Educational Alliance, Grand Street Settlement, Hamilton-Madison House, Henry Street Settlement, Recreation Rooms and Settlement, and University Settlement; from the Lower East Side Mission of Trinity Parish, and from the Lower East Side Neighborhoods Association. Also serving as trustees are three leading members of the local clergy, the project administrator, and the director of the research arm of the project.

Our constituent agencies have been working with children, young people, and their families for many years. In the present fiscal year we are spending over \$2 million in this work. Our experience, however, has indicated that while we are doing very helpful and worthwhile things with and for our young people, we have not been providing services in sufficient quantity to stem the tide of rising delinquency and crime. And may I add, in spite of being repetitive, we are in this respect like other communities across the Nation.

Mobilization for Youth has been designed as an all-out attack on juvenile delinquency. It is a closely coordinated, three-pronged attack consisting of the following main elements:

1. *Total mobilization of all of the community's human resources in the interest of its children and young people*

This means everybody getting together and working for a better, healthier community. Social scientists call this process neighborhood community organization. It involves establishing a working partnership between the young people and their parents, and the social institutions of their community—the churches, schools, social agencies both public and voluntary, the police, business and civic groups, labor unions, service and social clubs, and political organizations.

These may be old-fashioned words but what is needed is an aggressively good moral climate. It makes a great deal of difference when a teenager's mother will stop in the middle of a crowded street and firmly call down a group of boys for using filthy and obscene language, as happened just the other day in our block. Or when a young man in his twenties who is working his way through college and still has time to play on the ballteam, becomes the idol of the kids in the neighborhood. This kind of attitude can even transform a corner-lounging up-and-coming young hoodlum who has native qualities of leadership. These instances represent positive conditioning of the environment, the draining of swamps where infection breeds and spreads.

We are fortunate that such an approach to neighborhood community organization has already been launched. For the past 4 years the Lower Eastside Neighborhoods Association, one of our member agencies, has been carrying on an effective program of neighborhood planning and coordination. Mobilization for youth will provide the Lower Eastside Neighborhoods Association with the means to expand and intensify its work, so that community organization services will saturate the area.

2. *Treatment of the young people who are already delinquent, emotionally disturbed, or socially handicapped, and those who are vulnerable to these ills*

For this purpose, we plan to increase greatly the community's mental hygiene, health, and social services, and educational, vocational, and recreational oppor-

tunities, to the point at which it can fairly be said, they too, saturate the community.

Mobilization for youth will take the responsibility for all of the youngsters in our neighborhood who are already in trouble or who are likely to become so. To do this we will build on to existing services and, when necessary, inaugurate new ones. Concretely, this means that we will expand and intensify the work with fighting teenage gangs pioneered by the New York City Youth Board; we will extend the work with gangs of preadolescent boys developed over the past few years in our area; we will place skilled social workers in each school in the area to detect disturbed children at the earliest possible moment, following the guideposts set by the Glueck's of Harvard; we will expand the neighborhood-based mental hygiene services that already exist in the area and try to find new ways of bringing psychological services even closer to the youngsters and their families who need them; we will expand work with newcomers to the neighborhood, especially in the public housing projects, to help them adjust to their new homes; we will multiply the remedial reading clinics now operating in the area in cooperation with the public schools; we will have available for hard-to-place youngsters, many of whom are now in gangs, the specialized job placement and vocational guidance unit of the Lower Eastside Neighborhood Association called Contact.

How crucial these services are is well illustrated by the job-finding agency just referred to. Most of these delinquent teenagers have been failures in school and with their classmates, and if they cannot be brought into legitimate employment, they will inevitably find their place in the world of rackets, narcotics, and hoodlumism in general. In a real sense, we are in direct competition for these boys with the underworld syndicate.

The specific programs mentioned have already been tested in our area or elsewhere and found useful. Mobilization for youth is not a rigid scheme. We do not say to you that we have here a panacea. The intention is to experiment with these and other programs. Important in this process will be the close, day-by-day coordination of our action and research arms.

3. The third part of our three-pronged attack is social science research

The research center of the New York School of Social Work of Columbia University has undertaken the important responsibility of evaluating our project and conveying its findings to other communities. Their experts in the fields of criminology and social psychology are working up a research design calculated to measure the impact of the project on the community and on the individuals involved, from both the social and psychological points of view. They will also develop ways to measure the effectiveness of the component parts of the project. As stated earlier, scientific evaluation in this field is lamentably inadequate, and our colleagues from Columbia University have accepted a major challenge in undertaking to create meaningful indices for measuring change from the points of view of the individual, the group, and the community. Finally, they will explore basic questions in relation to the causes of deviant behavior among our young people.

Mobilization for youth will truly be a demonstration project—that is, it will not be just a service program or just a research project but, rather, an integrated combination of action and research.

It is planned that the project will continue for 7 years. It is imperative that we have in the beginning a tooling-up period during which time we can recruit, orient, and train the members of our action-research teams who are actually going to do this job. Only when this stage has been completed will the project go into full operation.

The cost of this project is high. When it is in full operation we anticipate it will cost approximately \$1,500,000 a year. For the whole project we will need approximately \$8 million. As important as the needs of the children and young people in our neighborhood are, we do not believe the expenditures involved could be justified over and against the needs of other communities if it were solely a service project for this one neighborhood. We do believe, however, that as a demonstration project which combines action and research, it is justified because what we will be doing will provide important learnings and know-how to communities throughout this country and world.

We see the Federal Government as the appropriate source for financing. On all sides it is agreed that juvenile delinquency is a national problem of top priority. We are in the process of applying for a grant under the title V program of the National Institute of Mental Health. We are of the firm hope and

conviction that the Institute will look favorably on the need for just such a community demonstration program. However, the Institute received only \$2,800,000 in its fiscal 1959 budget for title V grants. If the Institute is going to be able to continue and expand its important work in this field, such as the proposal we are making as well as other important projects around the country, it is imperative that their budget for title V grants be increased in the 1960 fiscal year. I would like, therefore, to urge strongly that this committee recommend an increase in the budget of the National Institute of Mental Health in order that moneys available for title V grants be increased by \$3 million.

Gentlemen, having made this request, I would like to add that I am aware of the many demands made on our Government for the support of many worthwhile programs in a wide variety of fields. But according to the Federal Bureau of Investigation, crime is costing the United States approximately \$20 billion a year. I would also like to recall a statistic I cited earlier today, that 20 percent of the boy population of our country is currently being ravaged by a disease, a disease of society, which manifests itself in juvenile delinquency and youthful crime. This, gentlemen, we are allowing to happen at a time when our country needs all of its strengths. We would agree, I am sure, that we have no more essential resource than our youth. Seen in this perspective, an additional \$3 million in 1960 for the title V program of the National Institute of Mental Health shrinks most significantly. In fact, can we afford to spend less?

JUVENILE DELINQUENCY PROBLEMS

Mr. CARLTON. I come to you today with a very real sense of urgency. It seems to us in New York that one of the major problems facing our Nation today is crime and delinquency among our children and young people.

I think, sir, it is appropriate that this subject should come to this committee because it is part of the spectrum of mental health, albeit a part that is usually much neglected. I believe that you are well aware of the size and importance of this problem.

There was one figure that we came across in preparing this testimony that startled me, and I think it may startle you. It is the estimate of I. Richard Perlman who is the Chief of Juvenile Delinquency Statistics in the Children's Bureau, that considering boys alone, the proportion of those who between their 10th and 17th years come into conflict with the law will be about 1 in 5.

Senator HILL. One in five?

Mr. CARLTON. One in five. And the article goes on to say that this is the part of the iceberg that you can see and there is much that you don't see.

Senator HILL. Most of the real iceberg is under water, as I recall, is it not?

Mr. CARLTON. That is exactly it. That is exactly it, I regret to say.

It seems to us, sir, that we are in the presence of an epidemic, a disease of society, and that this must be treated as we have learned to treat germ-created environmental and infectious diseases.

We must deal with the individual cases as they arise, of course, but at the same time we must search out the root causes in order to prevent the spread of infection and wipe out the sources.

MOBILIZATION FOR YOUTH

Against this background I would like, Mr. Chairman, to present for the information of your committee a plan that we are in the process of implementing in our community known as mobilization for youth. This is by way of example of what we mean by attacking an epidemic in its true shape and form.

Mobilization for youth was a combination of a number of agencies operating on the lower East Side of New York City. Our constituent agencies have been working with children, young people, and their families for many years and in the present fiscal year we are spending over \$2 million in our area in this work.

Senator HILL. How do you get those funds, if I may ask now, Mr. Carlton?

Mr. CARLTON. For the most part, sir, they are raised in the community by voluntary contributions.

Senator HILL. By voluntary contributions?

Mr. CARLTON. There are some city funds in that, some State funds but for the most part they are voluntary contributions. There are settlement houses, for example, in this group, and a number of parishoners of churches, and synagogues that are most active in working with young people, so we have this background of experience.

If I might I would like to go through the main elements of this program so as to spell out the type of attack that we are making.

Senator HILL. All right, sir.

Mr. CARLTON. Mobilization for youth has been designed as an all-out attack on juvenile delinquency. It is a closely coordinated three-prong attack consisting of the following main elements:

First, total mobilization of all of the community's human resources in the interest of its children and young people.

This actually means getting everybody together and working for a better, healthier community. Social scientists call this process neighborhood community organization. It involves the establishing of a working partnership between the young people and their parents and the social institutions of the community—the churches, schools, social agencies, et cetera.

NEED FOR GOOD MORAL CLIMATE

These may be old-fashioned words, Mr. Chairman, but what we see in our area as most needed is an aggressively good moral climate. It makes a great deal of difference, for example, when a teenager's mother will stop in the middle of a crowded street and firmly call down a group of boys for using foul and obscene language and that happened just the other day in our block.

Or when a young man in his twenties who is working his way through college and still has time to play on the ball team becomes the idol of the kids in the neighborhood. This kind of attitude can even transform a corner-lounging, up-and-coming young hoodlum who has native qualities of leadership. These instances represent positive conditioning of the environment, the draining of swamps where infection breeds and spreads.

We are fortunate that such an approach to neighborhood community organization has already been launched. For the past 4 years the Lower Eastside Neighborhoods Association, one of our member agencies, has been carrying on an effective program of neighborhood planning and coordination. Mobilization for Youth will provide the Lower Eastside Neighborhoods Association with the means to expand and intensify its work, so that community organization services will saturate the area.

TREATMENT PHASE OF PROGRAM

The second prong of this program, sir, is the treatment of the young people who are already delinquent, or emotionally disturbed, or socially handicapped and those who are vulnerable to these ills.

For this purpose we plan to increase greatly the community's mental hygiene, health, and social services, and educational, vocational, and recreational opportunities, to the point at which it can fairly be said they, too, saturate the community.

INTENSIFIED MENTAL HYGIENE SERVICES

Concretely, sir, what this program involves at this level is extension of an intensification of work with fighting teenage gangs, pioneered by the New York City Youth Board. For another thing, we will extend work with gangs of preadolescent boys, developed over the past few years in our own area.

Again, we will place skilled social workers in each school in the area to detect disturbed children at the earliest possible moment, following guideposts set by the group at Harvard.

For another thing, we will expand the neighborhood-based mental hygiene services that already exist in the area and try to find new ways of bringing psychological services even closer to the youngsters and their families who need them.

We will expand work with newcomers to the neighborhood, especially in the public housing projects, to help them adjust to their new homes.

We will multiply the remedial reading clinics that already exist, now operating in the area in cooperation with the public schools.

We will have available for hard-to-place youngsters, many of them now members of gangs, the specialized job-placement and vocational-guidance unit of the Lower Eastside Neighborhood Association called Contact.

If I may, I would like to take this last little section to illustrate how vitally important this kind of thing is.

NEED FOR SUCH SERVICES

Job-finding agencies are necessary for these delinquent teenagers because they are mostly people who have been failures in school and failures with their classmates. If they cannot be brought into legitimate employment, they will inevitably find their place in the world of rackets, narcotics, and hoodlumism in general, and in a real sense we are in direct competition with these boys with the underworld syndicate.

The specific programs mentioned have already been tested in our area or elsewhere and found useful. Mobilization for youth is not a rigid scheme. We do not say to you that we have here a panacea. The intention is to experiment with these and other programs. Important in this process will be the close, day-to-day coordination of our action and research arms.

This, sir, is the third part of the three-pronged attack. This is social-science research.

EVALUATION OF PROJECT

The Research Center of the New York School of Social Work of Columbia University has undertaken the important responsibility of evaluating our project and conveying its findings to other communities. Their experts in the fields of criminology and social psychology are working up a research design calculated to measure the impact of the project on the community and on the individuals involved, from both the social and psychological points of view. They will also develop ways to measure the effectiveness of the component parts of the project.

Actually there has been a terrific dearth of research in this field. I thought, listening this morning, sir, how happy we would be here if Dr. Peck and Mr. McCarthy and I could report progress as the medical men reported progress over the last 2 to 5 years. But we cannot. The recognition of ignorance is with us; I regret to say that it has extended for too long a period of time without anything being done about it. We are just plain ignorant. We do not know what we are working with or how to work. So this work of the Columbia University group is a very important basic part of this program.

And it is this that makes it truly a demonstration program, this Mobilization for Youth that I am talking about.

It will not be just a service program or just a research project but rather an integrated combination of action and research.

It is planned that the project will continue for 7 years. It is imperative that we have in the beginning a tooling-up period during which time we can recruit and train the members of our action-research teams who are actually going to do this job. Only when this stage has been completed will the project go into full operation.

COST OF PROJECT

The cost of the project, Mr. Chairman, is high. When it is in full operation we anticipate that it will cost approximately a million and a half dollars a year over and above what is now being expended in the neighborhood.

For the whole project thus we will need upwards of \$8 million. Now, as important as the needs of the children and young people in our own neighborhood are, we do not believe the expenditures involved could possibly be justified over and against the needs of other communities if it was solely a service project for this one neighborhood. We do believe, however, that as a demonstration project which combines action and research, it is justified because what we will be doing will provide important findings and know-how for communities throughout this country and indeed the world.

NEED FOR FEDERAL FUNDS

For this reason we see the Federal Government as the appropriate source for financing. On all sides it is agreed that juvenile delinquency is a national problem of top priority. We are in the process of applying for a grant under the title V program of the National Institute of Mental Health. We are of the firm hope and conviction that the Institute will look favorably on the need for just such a commu-

nity demonstration program. However, the Institute received only \$2,800,000 in its fiscal 1959 budget for title V grants. If the Institute is going to be able to continue and expand its important work in this field, such as the proposal we are making as well as other important projects around the country, it is imperative that their budget for title V grants be increased in the 1960 fiscal year. I would like, therefore, to urge strongly that this committee recommend an increase in the budget of the National Institute of Mental Health in order that moneys available for title V grants be increased by \$3 million.

Mr. Chairman, having made this request, I would like to add that I am aware of the many demands made on our Government for the support of many worthwhile programs in a wide variety of fields. But, according to the Federal Bureau of Investigation, crime is costing the United States approximately \$20 billion a year. I would also like to recall a statistic I cited earlier today, that 20 percent of the boy population of our country is currently being ravaged by a disease, a disease of society, which manifests itself in juvenile delinquency and youthful crime. This, gentlemen, we are allowing to happen at a time when our country needs all of its strengths. We would agree, I am sure, that we have no more essential resources than our youth. Seen in this perspective, an additional \$3 million in 1960 for the title V program of the National Institute of Mental Health shrinks most significantly. In fact, can we afford to spend less?

Senator HILL. That is a most interesting statement, I must say, Mr. Carlton.

Now do you wish Dr. Peck to follow you, sir?

Mr. CARLTON. If that is agreeable, sir; thank you.

Senator HILL. All right.

STATEMENT OF HARRIS B. PECK, M.D., NEW YORK, N.Y., DIRECTOR OF THE GROUP PROCESS DIVISION, DEPARTMENT OF PSYCHIATRY, AT THE ALBERT EINSTEIN COLLEGE OF MEDICINE, AND CONSULTANT, MOBILIZATION FOR YOUTH

MOBILIZATION OF YOUTH

Dr. PECK. Mr. Chairman and members of the committee, I am pleased to be able to appear here this afternoon and share some of my views with you as they pertain to the matter that you have just heard.

I appear in this connection as a member of the faculty of the Department of Psychiatry at the Albert Einstein College of Medicine, and I am also formerly the director of Mental Health Services for the New York City Court of Domestic Relations. And although I spent some 7 or 8 years working in the field of delinquency, I appear now essentially in the role of a public health psychiatrist, and this is the area that I am involved in in terms of teaching and research. So I speak for this particular project, the mobilization of youth, of which I am active as a consultant and to the field of delinquency as it pertains to problems in public health psychiatry.

Although the mental hygiene movement in the United States has existed for some decades, it is only within recent years that we have begun to have a clear idea about some of the steps that are necessary to prevent psychological illness in substantial segments of the Nation's population. One of the main laboratories for such work is the field of

delinquency. One of the reasons for this seems to rest in the fact that the delinquent youth in any community will reflect disturbances which tend to impair the health of other nondelinquent youth who live in the same adjacent neighborhoods.

WORK NOT NECESSARILY APPLICABLE TO LAWBREAKING

Therefore I would ask that when you consider projects directed at delinquency you do so with some awareness that they are applicable to matters which have nothing to do with breaking the law or violent antisocial behavior. We are beginning to view such manifestations as reflections of processes going on in the community that are damaging other youth who will not get into trouble or appear in the courts.

READING RETARDATION

I would like to very briefly give one concrete illustration of this. When I served as director of the Mental Health Services for the New York City Children's Court, we carried on a research demonstration project in which we took a look at the total court population and discovered to our own amazement, though we had some clues about it, that fully 75 percent of the children who appeared before the court had reading disabilities. They were brought into court not because they were in trouble in school but for reasons having nothing to do with their school performance, and yet we discovered that three-quarters of them were anywhere from 2 to 5 years retarded in reading.

The program which we developed to help these individuals who had this retardation was a rather unique and effective one. But I would like to draw a more important lesson from this, because, as a result of our work, the New York City school system was helped to focus on the children who were not getting in trouble with the law and who were having similar problems, so that we found that when we looked in certain eighth grade classes in the New York City school system, more than half of the children were reading at second and third grade levels. Therefore, any program directed initially at delinquent youth, but ultimately assisting those children who were in comparable kinds of difficulty, has to be seen as a public health measure, because in our society, Mr. Chairman, a child who does not learn how to read is not only under an educational disadvantage, he is in a bad psychological condition, because even to be an effective criminal one has to have some reading ability, not to mention any of the other more useful functions in society.

PRESENT PROGRAMS OVEREMPHASIZED

And one of the major failings of even our present best conceived antidelinquency programs is the relatively specialized and too constricted scope of such program. One of the things that you heard in the discussion of the mobilization of youth program was a program of extremely wide scope and we in public health psychiatry are interested in such programs because all of our present findings suggest that whenever a community has a major delinquency problem there are destructive processes at work which tend to affect not only the delinquent youth but the community as a whole. Our present idea of a delinquency program consonant with contemporary psychiatric and social science knowledge is that it must be directed both at the given in-

dividuals in the community and the crucial groups which determine their functioning.

We too often thought of programs directed at delinquent individuals. We are thinking now, for example, in terms of the so-called "hard core family" and it is our contemporary belief that unless a community can find the means to sustain the good life in families who might otherwise be destroyed it cannot provide the means for the youth of such families so that they will remain out of trouble with the law.

MENTAL HEALTH EMBRACES FAMILY DYNAMICS

One of our leading psychiatrists in this country, Dr. Nathan Ackerman, in a recent book on the "Psychodynamics of Family Life" has said that mental health cannot be understood within the limited confines of individual experience. The concentrated study of individual personality is significant and fruitful in its own right, but it is not enough, a broader approach to mental health must embrace the dynamics of the family group as well. And it must extend even farther to the complex weave of the interrelations of individual, family, and wider community.

In this connection you may be interested in one piece of our current research at the medical school of Albert Einstein that has some bearing on this project. We are no longer in our mental unit admitting psychotic patients as patients in our hospital. We are admitting whole families, in the belief—I don't mean directly on to the hospital ward although this has been done, but we make a study of the entire family and attempt to treat the family unit on the hypothesis that for many individuals simply directing treatment at them alone without attention to the family structure, which in many cases is related to their difficulty, is a useless and ineffective way of approaching it.

OTHER SIGNIFICANT FACTORS

So that I consider it highly significant that in this project that you have heard about the focus is not simply on the individual but through the housing project, through the church and through the community, the aim is directed at the family group on the one hand and on the delinquent gang as a whole on the other.

Our findings in this field suggest that adolescents who do not derive adequate sustenance at home succeed in discovering parental substitutions, brothers and sisters in the antisocial gang and just as it is difficult to be helpful to a child in a deteriorating family without extending assistance to the parents, few youths caught up in a delinquent gang can be helped by a program that does not have the machinery, the skills and the support to make contact and establish effective relationships with the gang.

TRADITIONAL APPROACH UNSUCCESSFUL

In my experience in developing and directing the Psychiatric Treatment Service of the Bureau of Mental Health Service in the New York City Court of Domestic Relations, a matter on which I have reported in a book published a few years ago, I reported some of my experience there where we attempted to use the traditional psychiatric approach to delinquent youths, and our success was very limited in-

deed until we began to use an approach known as group psychotherapy, in which small groups of delinquent youngsters are brought together to work with a psychotherapist.

We took youngsters in our first experiment who had after a year or two of treatment completely failed to derive any help from our traditional techniques and found that more than half of those did show significant improvement when treated in the group.

May I say that this was conducted under the most inauspicious circumstances because a children's court is hardly a friendly, receptive place to carry on psychiatric treatment. The program that you have heard suggested here gives the possibility of using just such group treatment measures under far more auspicious circumstances, that is, it contemplates dealing with groups of delinquent youngsters with knowledgeable, clinically trained people, working with them in their own setting, if you will, on the street corners, in the pool halls, in their community centers and so on.

And from all of our present experience this kind of an approach should pay off if anything is going to.

EARLY WORK ON DELINQUENCY

I would like to remind the committee that despite the considerable confusion to which I am sure you are subjected with the conflicting authorities and their opinions on the matter of juvenile delinquency we do have some substantial work in this area which goes back to the early thirties when in the city of Chicago a worker named Clifford Shaw carried on what was called a back-of-the-yards movement and did demonstrate that it was possible to drastically change the cultural climate—to use a phrase employed earlier—of whole sections of the city of Chicago. More recently the work of the New York City Youth Board has developed a number of effective techniques, including the work with detached gangs.

This kind of an approach does succeed in making contact with delinquent youth in a way that no traditional psychiatric approach is capable of.

I would like, therefore, to call your attention to the fact that the project which is contemplated does employ clinical personnel, and I consider this an important essential to such a program.

NEED FOR RESEARCH AS WELL AS SERVICE

The second factor that is present here is the combination of the extensive program of service carried on at multiple levels within the community in combination with a research program which gives it a scientific framework and is at the same time responsive to the living data derived from day-to-day contacts with the community.

Our feeling is that it is unjustified for the community to pour substantial amounts of money into a program such as this unless it is supported by a framework of research and you can have a play back and forth between the service program and the research program.

DELINQUENCY NOT CONFINED TO UNDERPRIVILEGED

One last word on the major point I would like to make. I believe I would be seriously failing in my obligation to this committee if I

did not transmit to you one urgent conviction derived from my close to two decades of psychiatric practice. In addition to my associations on a medical school faculty, court, and my work in the community, I spend a substantial amount of time engaged in the treatment of youngsters from more privileged segments of the community. As you know, Mr. Chairman, to afford private psychiatric care requires a fairly adequate income.

The impression which I would like to convey to you is derived from such practice and I would like to call most urgently to your attention an impression which I do share with my colleagues who are working in this field.

This impression is also supported by the work of the special juvenile delinquency project some years ago under the auspices of the U.S. Children's Bureau. Juvenile delinquency has customarily been thought of as a phenomena occurring in the crowded sections of large cities and among youth of lower socioeconomic background and many of whom belong to minority groups. There is a rather dramatic change which seems to be happening. It is reported in the public press and our impressions do tend to support it, the classrooms of the good suburban school, the police records of better middle-class communities are reflecting this trend. The symptoms of antisocial violence and flagrant hostile disregard for authority, first manifested in the more vulnerable areas, has now assumed such force and dimension that they neither can be adequately compensated for nor further concealed even in our well-to-do, protected communities.

So that juvenile delinquency which we thought of as a big city, low income phenomena is moving into our urban and rural areas and is beginning to hit middle-class groups with a significant impact.

DELINQUENCY EPIDEMIC IN PROPORTION

Just as the medical profession discovered that typhoid could not be dealt with one case-by-case basis, but required an overall community approach to protect its citizens, so delinquency as it assumes epidemic proportions can only be dealt with by a planful, scientific community-wide attack. In fact, I do not believe, that I am being unduly alarmist if I state, with some conviction, that few of us in this room today can consider that our homes, our children, will be safely isolated from the danger if it continues to gather the momentum that it seems to be gaining.

If I may be permitted an aside I brought my own family and children down here today not only because I want them to see the work of this committee and of the Congress, but because I feel the matter on which I speak very seriously does affect not just my own professional work but the welfare of all of us and our own families.

FEDERAL RESPONSIBILITY

In conclusion, I would like to say that I believe our Federal Government has a responsibility to provide leadership and funds for further experimentation in the field of delinquency prevention and control. This is not a problem of any one community. It is a problem of national magnitude. The National Institute of Mental Health has under its title V program made an excellent start in promoting

and supporting action research in this field. However, the present allocation of \$2,800,000 made available for the use of the Institute in their fiscal budget of 1959 is, I believe, inadequate if they are to expand and intensify their efforts in the field I have indicated. The organization, Mobilization for Youth, is seeking funds from the Institute in the 1960 fiscal year and if the Institute is going to be able to support projects like this and other worthwhile experimental projects in various parts of the country it is of the utmost importance that the budget for the title V program be increased for the coming fiscal year.

It is therefore my urgent and very seriously considered recommendation that the title V program of the National Institute of Mental Health be increased by \$3 million in 1960. Such an expenditure will, I am certain, be an economy in the long run for the Nation, it will mean fewer of our youngsters ending up in the courts, training schools, prisons and mental hospitals. It will also mean building safer, healthier, happier communities for all of our people.

Senator HILL. Mr. McCarthy, we have three very busy doctors who are waiting to testify. Do you have some comment you would like to make?

Mr. McCARTHY. No, I did not have. I am the administrator on Mobilization for Youth and came along with the other gentlemen.

Senator HILL. I didn't have you as a witness.

Mr. McCARTHY. It isn't necessary. I subscribe completely to what my colleagues have said.

Senator HILL. Did you have a comment you would like to file for the record?

Mr. McCARTHY. I testified very extensively before Congressman Fogarty's committee. So the comments I have there are in the record, sir.

Senator HILL. Yes.

Mr. McCARTHY. The only thing I wish to say is I have had long experience in street contact and on the firing line. I see the need is very great and I hope the Federal Government will see ways of providing leadership and support that my colleagues indicated is necessary.

Senator HILL. Thank you, sir.

HOUSE COMMENT

Let me ask you this question, Mr. McCarthy. I notice on page 561 of the House hearings on this bill, Dr. Felix had this to say:

In fiscal year 1959 thus far a total of \$2,750,000 has been awarded. That is under title V. In addition, there are pending before the June 1959 Council 87 applications totaling \$3,303,746. This does include two pending applications in the amount of \$1,647,925 from the Henry Street Settlement to be reviewed by a special ad hoc committee April 25, 1959.

Has the review been made by the ad hoc committee, do you know, sir?

Mr. CARLTON. The review has been made, sir, on the consultive basis but without our making formal application at this time to the Institute.

Senator HILL. You have not yet made your formal applications?

Mr. CARLTON. That is correct, sir.

Senator HILL. I see. In other words, those applications are not among the number of 87 applications that Dr. Felix said was pending?

Mr. CARLTON. I am not sure—at that time it might not have been—

Mr. McCARTHY. Yes, Mr. Chairman, I think it was, sir. I attended the ad hoc meeting at Ann Arbor. It was the first time we met with the group and our research component and action program. It was the conclusion at that meeting that we submit our application for formal consideration by September 1 to be considered by the ad hoc committee then and then go to the council of the Institute in November. So that the target date we would be looking toward is December 1, 1959.

Mr. CARLTON. This would be.

Mr. McCARTHY. Part of it, yes.

Mr. CARLTON. Dr. Felix's total would include our applications, sir, at this time?

Mr. McCARTHY. Yes. The figure includes our request, yes.

Mr. CARLTON. Yes. Right.

Senator HILL. I am sure you gentlemen are familiar with the language in the House report on this appropriation bill.

Mr. McCARTHY. Yes.

HOUSE LANGUAGE

Senator HILL (reading).

Accordingly, the committee calls upon the National Institute of Mental Health to use such portions of the increased 1960 funds as may be necessary to undertake a most careful and thoughtful study of what can and should be done in future years in the field of juvenile delinquency. It asks the Institute to take primary responsibility in this field and assumes that funds available under title V of the Health Amendments Act of 1956 can be used for such purposes. It assumes that the Children's Bureau can also participate under its existing authorities. The committee further asks that the National Institute of Mental Health submit a detailed report by January 1, 1960, including both substantive and fiscal proposals, so that the report may be considered by the next session of Congress and its appropriate committees.

Is there any comment you would like to make on that language, Mr. Carlton?

LANGUAGE DOES NOT PROHIBIT ACTION

Mr. CARLTON. Only this, sir. We would very much hope that that language would not inhibit prompt action on the part of the Institute to help plan and mount the type of action research that we have outlined to you today.

We believe that we are by no means the only ones who wish to engage in this kind of work. This is properly, we think, part of the extramural program of the National Institute, and as I say, we hope that while the Institute should report, of course, as requested by the House committee, we hope that they will still go on and make it possible to get started out in the field with this kind of thing.

Do you want to add to that?

Mr. McCARTHY. I only want to say, Mr. Chairman, we thought it was a very positive step forward for the Federal Government to pin responsibility on one particular administrative unit, in NIMH and are pleased with the auspices of NIMH.

The only thing is, as Mr. Carlton said, we hoped there wouldn't be a moratorium on extramural projects in the interim period.

Our anticipation was it would not necessarily be that way. If there are funds to be used, sound projects across the country could be done at the same time, and people at NIMH could be gaining from what was being done in the field.

Dr. PECK. May I add a brief word of support to that, Mr. Chairman?

I think the need for planning as contemplated in this proposal is an excellent one. On the other hand, though there be a great many things we do not know in the field of juvenile delinquency, as I know you must be aware, there are some things we must know quite well, because we have attempted them and they do work. Our hope is that we won't postpone putting the things to work that we know are effective while we had planned for broader programs.

Senator HILL. I think we will all agree as to the fact that juvenile delinquency is one of our most pressing, challenging problems. I happen to be the author in the Senate of the act that we passed in 1956—the amendments to the act which gave us these provisions that we know under title V. I think I know how important it is to have these projects going—these demonstration projects—and certainly we appreciate you gentlemen coming down here today and bringing this matter to our attention so clearly and so forcefully and giving us so many helpful facts and so much helpful information.

We appreciate it very much.

Mr. CARLTON. Thank you.

Senator HILL. Glad to have you, gentlemen.

Now Dr. Robert Berson, dean of the Medical College, and vice president of Alabama University, associate director, survey of medical Education, 1949 to 1958. Doctor, we are very happy to have you here, sir.

Dr. BERSON. Thank you, Senator.

Senator HILL. And we welcome you, sir, and we are glad to have you now proceed in your own way, sir.

STATEMENT OF DR. ROBERT C. BERSON, DEAN OF THE MEDICAL COLLEGE AND VICE PRESIDENT FOR HEALTH AFFAIRS, UNIVERSITY OF ALABAMA

GENERAL STATEMENT

Dr. BERSON. Mr. Chairman, if it is all right with you, I believe that the committee has copies of my prepared statement.

Senator HILL. We do, sir.

Dr. BERSON. And in addition to that I would like to deviate a little bit from the format.

Senator HILL. All right. You just proceed now in your own way, sir.

Dr. BERSON. I have a few remarks.

DEVELOPMENT OF RESEARCH

As you know, I have been deeply interested in the development of research in this country since before I was with the Survey of

Medical Education. On this occasion, I speak for the association of American Medical Colleges, and I think you are aware that each of its member institutions from its very beginning has been doing what it could to encourage the development of research, and to help train workers to carry on in the future. The association is strongly in favor of increased support for research in an orderly manner as the personnel and facilities are available to carry it out. So in asking for the full cost of research in project grants, the association is asking for an increased appropriation rather than taking away funds from another part of the program.

It is basically because the institutions continue to be interested in an adequate supply of good investigators that their plea in this matter is so urgent.

BURDEN OF INDIRECT COSTS

In the beginning of the National Institutes of Health grant program the fact that they paid nothing for indirect costs made very little difference because the programs were so small.

On page 7 of this prepared statement there is a table that gives some of the figures on indirect costs and how the burden on the institutions has increased since 1948.

Senator HILL. It has been a very perceptive increase, has it not, Doctor?

Dr. BERSON. Yes, sir. In figuring indirect cost in this table, the figure of 30 percent of direct cost has been used. Actually the actual direct cost varies with each project as well as each institution, but it is almost always higher than 30 percent. But as you see between 1958 and 1959, the burden of indirect costs on the institutions, the member institutions of the association has increased by about \$3½ million and on the basis of the appropriation passed by the House it will increase another \$3 million between 1959 and 1960.

REASONS FOR INCREASE IN COSTS

Senator HILL. Is this increased cost, Doctor, due primarily to the enlargement of our research programs?

Dr. BERSON. Yes, sir.

Senator HILL. I just wondered if there was any other major factor entering into it. Things cost more today than they did a few years ago.

Dr. BERSON. Yes. This is true, but I think these figures are based on percentages. In the immediate future all of our institutions are going to feel the impact of another advance. Twenty years ago research in medical schools was carried on wherever it could be fitted in in existing facilities and in various places. Those facilities were in existence, and they were being maintained.

EFFECTS OF CONSTRUCTION OF RELATED FACILITIES

Under another program made possible by the Congress the construction of health related research facilities has been going on in this country and many of those fine facilities will soon be in full operation. They are for the purpose of research. They are going to have to have housekeeping and utilities and maintenance, and this cost is going to be felt very acutely by the institutions themselves.

Now, if no adjustment is made for this increasing load of indirect costs on the medical schools and the universities, no adjustment by the Federal Government, there will continue to be an increasing drain on the resources of these institutions. At the present time the drain amounts to almost as much as tuition income which is very close to the total endowment income of all the medical schools in the country.

Senator HILL. It costs almost as much as your total income from tuition?

Dr. BERSON. Yes, sir. It is true that many schools have raised their tuition in the last few years, although all of us are aware that this is quite a hardship to the student and maybe serves as a detriment in recruiting the increased number of students that we need in the future.

Senator HILL. You were here this morning and heard the discussion that took place about the need for more students. Increasing the cost of tuition certainly would not be conducive of getting more students, would it?

Dr. BERSON. No, sir. It would be quite the opposite.

Another impact of this drain on the resources of the institutions is that it impairs their ability to adjust faculty salaries to the level that they should be and to provide basic administrative and supporting services for research. This, too, can hurt us in our future efforts to recruit and train enough research workers for the future.

In this prepared statement I have also used some quotations from a paper by Dr. Kenneth Endicott which has been submitted for publication.

CONCLUSIONS OF COMMITTEE

His committee, which was a staff committee of National Institutes of Health was asked to make an intensive study of 20 schools. In general their conclusions agree with everyone else who has taken a close look at this matter, which is that the drain of the indirect costs on the institutions is an increasingly serious one and will grow more serious as the program expands unless there are appropriate adjustments.

CONTINUATION OF LIMITATION ON INDIRECT COSTS

Now, in the statement from the conference committee of last year two reasons were advanced for continuing the wording, limiting the indirect costs to 15 percent. One reason was that many voluntary agencies supporting research did not support it beyond a small percent. Now, one of the major voluntary agencies, the American Cancer Society, has revised its policy and is beginning to pay 25 percent of the indirect costs.

Senator HILL. That is an action of the American Cancer Society, isn't it?

Dr. BERSON. That is correct.

Senator HILL. The 25 percent?

Dr. BERSON. That is right.

Other major agencies have not yet done that, but the National Foundation, which used to be the National Foundation of Poliomyelitis, has had for several years a policy of making a sincere effort of meeting the full cost of research they support. It is also interesting in contract

research in noneducational institutions that the National Institutes of Health do pay the full cost of the research whatever the amount of indirect cost it may have to be.

Senator HILL. In other words, where the National Institutes make a contract with a research institute that is not a medical school or medical college, under the provisions of that contract the institutes pay the full cost.

Dr. BERSON. That is correct.

BUDGET BUREAU APPROACH

Another factor that has developed since last year is that the Bureau of the Budget in September did issue Circular A-21 and this formula, this circular has now been followed in several of our universities who studied its applications closely and have come to the conclusion that this approach to determining the full cost of responsive research is fairly satisfactory.

I understand that later this week the American Council on Education will testify on this particular point. The Association of American Medical Colleges is strongly in agreement that this circular should begin to be used as soon as it is authorized, although it probably can be improved in minor details as it is used in the future. In other words, there does seem to be a formula that is workable and will bring them a great measure of relief with this problem.

FULL SUPPORT OF RESEARCH ASKED

It is my own opinion that we should keep it in mind, that what the association is asking for is the full cost of research grants not some loosely defined extra sum of money that will help with its basic operations. Whether there should be Federal aid for medical education as such is a separate and distinct point. So the association would like to urge that the wording of the appropriations act be such as to encourage and require all agencies making grants in support of research to support the full cost of that research.

Senator, I believe that covers the gist of what I had.

Senator HILL. Doctor, what is your opinion as to the effect on medical research unless we meet the requests and recommendations which you have presented here today.

Dr. BERSON. Senator, I think that the future of sound development of research in this country will be measurably in danger unless research is fully supported. Most of the active investigators of today were recruited and trained in the same institutions now carrying out the research before the NIH program began. For this national research effort to continue to expand we have to have a growing number of good people. It is the universities and medical schools of this country who are in a position to recruit them and train them. So I think that a sound economic base for research is one of the elements in the future research program of the country.

Senator HILL. The student of a medical school where research is going on is in a much more favorable climate, you might say a much more challenging climate so far as getting him to go into medical research than if he is in a school where there is no medical research; is that true?

Dr. BERSON. Oh, yes, decidedly true.

Senator HILL. You have said this morning and all the testimony before shows a great need to get more and better people—I almost used the word men—on second thought, people, men and women, to go into medical research. It seems to me one place where this medical research can be of greatest benefit is when it would be carried on right in your medical school center, so to speak; isn't that true?

Dr. BERSON. I agree, sir. And actually the medical schools and universities of this country not only recruit students and stimulate their interest in research, but men and women who are trained as Ph. D.'s in several disciplines have made and will continue to make tremendous contributions. These people can only be attracted and trained in the universities and medical schools of this country.

Senator HILL. You may have taken note this morning that one of our distinguished visitors was a doctor of science. He brought us that new word "logopedics."

Dr. BERSON. Logopedics?

Senator HILL. Yes.

Doctor, you brought us a very fine statement and I think a very clear, strong, constructive statement, to me a very convincing statement. We certainly want to thank you for it, sir. We so much appreciate your presence and appreciate this fine testimony very much. Thank you, sir.

PREPARED STATEMENT

Senator HILL. Your full statement will appear in the record.
(The statement referred to follows:)

STATEMENT OF DR. ROBERT C. BERSON, DEAN OF THE MEDICAL COLLEGE AND VICE PRESIDENT FOR HEALTH AFFAIRS, UNIVERSITY OF ALABAMA

I am Robert C. Berson, dean of the Medical College and vice president for health affairs of the University of Alabama. I very much appreciate the opportunity to testify before this committee, whose chairman and members have done so much to encourage and support the development of medical research. I wish to speak to that portion of the Health, Education, and Welfare budget dealing with the extramural programs of the National Institutes of Health, and specifically to the congressional policy that prohibits this agency from paying the full costs of research which it supports through grants. I speak for the Association of American Medical Colleges which on February 7, 1959, unanimously passed the following resolution:

"Whereas the U.S. Public Health Service and many of its subdivisions, particularly the National Institutes of Health, have rapidly increased their support of medical research and research training, and

"Whereas the dollar volume of this research and training has nearly reached \$100 million for the year 1958-59, and

"Whereas only 15 percent of each grant is allowed for the indirect cost thereof, and

"Whereas numerous studies have shown that the indirect cost is actually far in excess of this allowance, and

"Whereas this difference must be made up from funds which otherwise would support programs in education: Therefore, be it

Resolved, That the medical schools of the United States, which comprise the institutional membership of the Association of American Medical Colleges, request the U.S. Congress to require that all Federal agencies that support medical research provide for the full costs thereof."

In supporting this resolution it is my purpose to call the Senate's attention (1) to the increasing magnitude of the financial burden that is being carried by this Nation's universities and medical schools in the interests of NIH-sponsored research and (2) to the fact that the time has come when this situation must be resolved by reimbursement for the complete costs that are involved.

In the early days of NIH-sponsored research, no provision was made for the payment of indirect cost and it was not until January 1947 in recognition that this was becoming a serious financial problem to our universities and medical schools, that an allowance of 8 percent was authorized. On January 1, 1955, this was increased to 15 percent and, though this repeatedly has been shown to be inadequate, there it has remained.

Since Dr. Ward Darley, the executive director of the Association of American Medical Colleges, and I testified before Representative John E. Fogarty's subcommittee on April 15, 1959 (House of Representatives Appropriations Subcommittee on Departments of Labor and Health, Education, and Welfare, and Related Agencies), new information has become available which again justifies the proposition that National Institutes of Health grants should be permitted to provide for the complete costs of the research which they support.

I will refer first to information that comes from the NIH itself. During the winter of 1958-59, as part of a general study of the role of the impact of conditional grants on our medical schools, this agency had its staff visit 20 institutions. Part of this assignment was to ascertain the extent of both the direct and indirect cost problem as far as NIH research grants were concerned. I quote from the paper which Dr. Kenneth Endicott, the director of the project, has just submitted for publication in the Journal of Medical Education:

"With accounting procedures now in use at most of the medical schools it has not been possible for the committee to determine accurately the total cost of research. There is no unanimity as to the proper method for determining indirect costs. Furthermore, most schools do not charge such items as senior faculty salaries against research so that the 'separately budgeted research' item does not contain the full direct costs.

"In an effort to develop an approximate estimate of the total cost and the share borne by the school the staff committee made special inquiries in a few schools and believes that the estimate shown in table 4 is on the conservative side.

TABLE 4.—Estimated total cost of research in 9 public and 7 private medical schools 1957-58

Source	Costs		
	Direct	Indirect	Total
Total.....	\$27.3	\$6.8	\$34.1
Gifts, grants, and contracts.....	21.8	2.2	24.0
Institutional funds.....	5.5	4.6	10.1

"In these 16 schools 'separately budgeted research' in 1958 was \$24.8 million. It was assumed (1) that 10 percent of the direct costs, such as salaries of investigators, are not budgeted in the item called 'separately budgeted research' and (2) that indirect costs average 25 percent of direct costs. The estimate suggests that the full cost is nearer \$34 million than \$24.8 million. Of this estimated \$34 million, about 30 percent would have to be derived from institutional funds since gifts, grants, and contracts including allowance for indirect costs provide only about \$24 million."

The author points out that the above figures apply to all sponsored research in the 16 medical schools reporting, whether sponsored by NIH or not. I am sure that it is safe to assume, however, that the 30-percent figure Dr. Endicott mentions applies to grants from the National Institutes of Health as well as to those from other agencies.

That Dr. Endicott shares in this opinion and also that he sees the medical schools' problems that are related thereto is borne out in the conclusion of his paper when he states:

"During the past decade the schools in this survey have grown rapidly. The faculties have doubled, expenditures have tripled, and facilities have been improved and expanded. Research has emerged as a major activity.

"Gifts, grants, and contracts provide approximately half of the total income.

Thirty-six percent of the faculty is paid in full or in part from 'soft' money. A substantial portion (perhaps as much as 15 percent) of the school's own funds must now be used to support the indirect costs associated with these gifts, grants, and contracts.

"These developments have undoubtedly resulted in decreased institutional autonomy and faculty security. If the trends of the past decade continue without compensatory measures it seems likely that there will be serious consequences. Faculty positions will be less and less attractive. The schools will have less and less ability to plan and reach institutional objectives.

"On the other hand the increase in gifts, grants, and contracts has done much to make possible the development of research programs and training programs which the faculties wanted and which couldn't have been financed with institutional funds. It seems virtually certain that faculty pressure upon the school administration to accept additional 'soft' money will continue even at the expense of institutional stability and autonomy.

"The extent to which the schools may be able to compensate by finding additional 'hard' money is a moot question. In general, the public schools appear to be meeting this problem more successfully than the private schools.

"The National Institutes of Health staff committee, which made this study, concludes that granting agencies like the Public Health Service can and should provide at least partial solution to these problems by (1) paying full costs on grants and (2) providing fluid research support in the form of long-term institutional grants, in order to reinforce institutional autonomy and to provide funds for stabilizing careers of faculty paid from grant funds."

The other recent information that is important to my position comes from the Bureau of the Budget. In developing my point, I wish to refer to a statement which appears in the report of the House-Senate conference dated July 17, 1958, amendment 54, page 10 (85th Cong., 2d sess. H. Rept. 2220)

"Inserts language proposed by the House and stricken by the Senate which limits the amount that may be paid to cover indirect costs of a research project to 15 percent of the direct costs. The managers on the part of both the House and the Senate agreed to the restoration of this limitation with the understanding that the question of changing such limitation was being deferred due to the fact that the interagency committee composed of representatives of the agencies of the Federal Government most concerned with this matter have not yet made their final report and many volunteer agencies making grants for research projects are not at the current time paying in excess of 15 percent and some are paying considerably less."

On September 10, 1958, the Bureau of the Budget issued circular A-21. We assume that this circular, as issued by the Bureau of the Budget, represents the report of the interagency committee referred to in the above quotation. Several of our universities have been studying circular A-21, and while certain alterations that would simplify its application may be suggested, it is now the conclusion that circular A-21 offers the basic solution of costing Government-sponsored research and that no time should be lost in providing for its general use. Later this week the university viewpoint regarding circular A-21 and the manner of its use in costing federally sponsored research will be presented to this committee by the American Council on Education. The Association of American Medical Colleges strongly concurs in the recommendations that will be made.

The medical schools of this country are not unaware of the fact that many volunteer agencies are making inadequate provision for the indirect costs of the research which they sponsor. The Association of American Medical Colleges is exerting every effort to have this situation corrected. For many years the National Foundation has provided up to 90 percent of the complete costs of research, and, beginning this year, the American Cancer Society is paying 25 percent of direct costs. The effort to persuade the other volunteer agencies to more fully meet the costs of the research they sponsor will continue, and if the National Institutes of Health would provide for the full costs of its sponsored research, the medical schools would be very materially assisted in this matter.

The National Institutes of Health are now supporting well over half of the sponsored research going on in our schools of medicine. I would like to go back and show how NIH-sponsored research has increased and how much this has been and is now costing our schools. In doing this, while we are now urging full reimbursement, I will use 30 percent of direct cost as an approximation of the amounts of money that are involved. The following table tells the story:

Separately sponsored research in schools of medicine as provided by HEW and NIH grants and the approximate share of indirect expense being carried by the schools

[All dollar figures in millions]

Year	Amount of separately budgeted research provided by HEW and/or NIH (1)	Total cost of indirect expense as 30 percent of grants (2)	HEW and NIH allowance for indirect expense		Total medical school contribution to indirect expense of HEW- and NIH-sponsored research (col. (2) minus col. (4)) (5)
			Percentage allowance (3)	Dollar amounts (4)	
1948-----	¹ 4.2	1.26	² 8	0.33	0.93
1954-----	¹ 14.2	4.23	8	1.128	3.102
1958-----	³ 48.0	14.40	² 15	7.2	7.2
1959-----	³ 70.0	21.0	15	10.5	10.5
1960-----	⁴ 95.0	28.5	15	14.25	14.25

¹ National Science Foundation: "Scientific Research and Development in Colleges and Universities, Expenditures and Manpower," 1953-54, pp. 45-48. This amount is for all HEW grants and includes NIH.

² Letter from Director of NIH, dated Mar. 11, 1959.

³ Letters from Director of NIH, dated Mar. 11 and 17, 1959. These amounts are for NIH only; they do not include other HEW grants to medical schools. The 1958 total of all NIH grants to all agencies was \$97,729,000, of which approximately ½ went to schools of medicine. Similarly, of the total of \$141,454,000 available for 1959, ½ will go to schools of medicine.

⁴ Estimate as per (3) assuming that the \$50,000,000 added to the 1960 NIH research appropriation by the House of Representatives (see p. 14 of the committee report accompanying H.R. 6729) will be passed by the 86th Cong. and that ½ of this will go to schools of medicine.

The figures in column 5 of this table show that in the 11-year period between 1948 and 1958 the difference between the indirect cost allowed and the actual expense has gone from less than \$1 million to over \$7 million—an increase of almost eight times. Between 1958 and 1959 this cost has gone from \$7.2 to \$10.5 million, an increase of almost \$3½ million. And the appropriations as recently passed by the House will increase this cost from \$10.5 to \$14.25 million—another increase of \$3½ million.

One way of emphasizing the magnitude of the problem that is developing is to point out that the time is fast approaching when the cost of indirect research will equate the medical schools' income from tuition. It can also equate the income from endowment. For the year 1957-58, medical school income from tuition amounted to \$17.5 million; that from endowment \$16.5 million.¹ In this same year the schools' share of indirect research cost was over \$7 million, in 1958-59 it will be \$10.5 million, and next year \$14.25 million. Medical school income from tuition and endowment will not go up proportionately. So that if NIH support of research continues at its present rate, and in the meantime does not provide for increased reimbursement, the following year—1961—will see the time when indirect cost will equal the income from tuition or from endowment. It must be realized that the total expense of research must be met from some source, if not by the agency making the grants, then by the agency accepting them.

In raising the question of full reimbursement for NIH-sponsored research, the medical schools are not asking for Government subsidy. They are only asking full payment for a service they are rendering. When the National Institutes of Health or other Federal agencies contract for research with a noneducational institution, there is no question about the provision of full reimbursement. By contrast, then, why is it that medical schools and universities should not receive the same consideration?

Except that all teaching programs need strengthening by the addition of faculty, it is not possible to generalize as to how the incomplete provision for sponsored research is hampering our schools of medicine. This is because no two schools have the same resources or the same problems. But it is certain that the rapid changes taking place in medicine are causing all manner of difficulties for our schools, all of which can only be helped by money and the know-how that money can buy. The Senate can rest assured that if the Congress will provide full reimbursement for the costs of research, the general funds of

¹ Educational number, Journal of American Medical Association, 168: p. 1494, Nov. 15, 1958.

our medical schools and universities that will thereby be freed will go far toward helping these institutions strengthen other areas that are just as important to this Nation's future well-being as is research. The conclusion of Dr. Endicott's paper, which I have quoted previously in this testimony, adequately emphasizes this point.

We are definitely not advocating that the Congress meet this problem by cutting the amount of money available for research. The answer is to appropriate the amount necessary to continue with both the research that is needed and also for its complete support. With the annual amount of money going to NIH for sponsored research now passing the \$100 million mark and with each year showing a substantial increment, funds sufficient to provide for the complete cost should be provided before the disparity between the total amount provided and the actual total cost becomes any greater. In effect the amount of money a university or medical school must now apply to the indirect costs of research must be looked upon as a first lien upon its income—an expense, albeit one that is hidden in the institution's overall financial operation, that must be paid irrespective of the relative importance of other needs. There has to be a limit to which our universities and medical schools can be expected to continue in this direction. And it is now time for the Congress to recognize that this limit has been reached.

We hope that the Senate will insist that the following steps be taken to correct this situation, and this in the present session of Congress.

First, that the 15 percent restriction as presently contained in H.R. 6769 be eliminated; and second, since Circular A-21 can provide "a uniform approach to the problem of costing research and development performed by educational institutions under grants from and contracts with the Federal Government",² that full reimbursement be authorized and the funds essential thereto be appropriated.

LIMITATION ON INDIRECT COST OF MEDICAL RESEARCH

Seantor HILL. Mr. William B. Harrell has submitted a statement on behalf of the American Council on Education in opposition to the limitation on indirect cost of medical research, which will be included in the record at this point.

(The statement referred to follows:)

STATEMENT OF WILLIAM B. HARRELL ON BEHALF OF THE AMERICAN COUNCIL ON EDUCATION

The membership of the American Council on Education includes 143 educational organizations and 1,038 institutions, among them nearly all of the accredited colleges, universities, and junior colleges in the United States.

This statement is directed toward the limitation on reimbursement of indirect costs under grants from the Department of Health, Education, and Welfare for research in the life sciences to 15 percent of direct costs, which was fixed by the Congress in authorizing appropriations for this purpose for the fiscal years 1958 and 1959. The opportunity to comment on the financial problem created for educational institutions by this limitation is deeply appreciated.

Since World War II, the Congress has made possible a large expansion of research programs in the life sciences at educational institutions through appropriations for this purpose available to the Department of Health, Education, and Welfare. It is assumed that the purpose of the Congress in authorizing such appropriations is to strengthen the Nation by increasing scientific knowledge and enlarging and improving the Nation's scientific capabilities. Educational institutions are by reason of the special talents of their scientific and professional staffs, and by their tradition of freedom in research and teaching preeminently qualified to make important contributions to the advancement of knowledge. The sponsorship of scientific research by the Government has also increased the capacity of educational institutions to train young scientists to carry on the Nation's research and training programs in the future.

² Executive Office of the President, Bureau of the Budget, Circular No. A-21, Sept. 10, 1958, p. 1, par. labeled "1. Purpose."

As recently as 20 years ago, scientific research in educational institutions was a comparatively small activity, whether measured in terms of man-hours, or annual expenditures. Prior to 1940, only a few universities were able to appoint to their staffs men and women whose primary responsibility was to carry on research and train advanced research workers. Before 1940, the general rule was that the professor performed his research in the limited time available after discharging his teaching responsibilities, on weekends and during vacation periods; often in small and inadequately equipped laboratories. The average professor considered himself fortunate if he could obtain a grant of \$3,000 to \$5,000 from a private foundation to assist him in purchasing a few scientific instruments and research materials.

Fortunately for the Nation, this situation has changed radically during the past two decades. At the present time, leading educational institutions are so organized that a substantial fraction of the time of the faculty and of the annual budget is available for research and for training advanced graduate students. The expanded research programs, however, have entailed major changes in organization and operation. Large capital expenditures have been made for new laboratory facilities. Supporting staff has been added to assist leading investigators in carrying on their research. Administrative staffs have been enlarged to handle the maintenance and operation of the expanded plant, to purchase and maintain scientific equipment, to procure research materials, to handle the accounting for expenditures and to prepare the required scientific and financial reports.

Fiscal policies which did not recognize all indirect costs of research and advanced graduate training were tolerable for educational institutions when the volume of research was comparatively small, and the primary emphasis was on undergraduate teaching. Educational institutions, however, are no longer in a position to provide from other sources the necessary funds to cover the related indirect costs of the expanded research programs which have been undertaken to a large extent under Government sponsorship.

The President's Science Advisory Committee in a report entitled "Education for the Age of Science," which has just been released, includes as one of its recommendations that "Government agencies concerned with research in science and engineering reexamine the terms of their research support to educational institutions with a view to avoiding placing a financial burden or penalty on such institutions by reason of inadequate coverage in research contracts or grants of costs properly chargeable as overhead and for management allowances. Without serving as a subsidy in any way, proper handling of these fiscal matters can make certain that the research support will not affect adversely the opportunity to use the research effectively for the education of students, for the attraction and retention of able faculty members, and for the release of teachers and students from burdensome administrative and fiscal restrictions."

In 1955, the National Science Foundation prepared a report which emphasized the lack of uniformity among agencies of the Federal Government with respect to the payment of indirect costs on Government-sponsored research, and suggested a governmentwide study. Early in 1956, the Director of the Bureau of the Budget took the initiative and in August of that year organized an Interagency Committee. This Committee issued and made available to representatives of colleges and universities for study and comment (under date of April 22, 1957) a draft of "Principles for costing research and development under grants and contracts with educational institutions." The American Council on Education, at the invitation of the Director of the Bureau of the Budget, appointed a committee of representatives of colleges and universities to work with the Interagency Committee in reviewing and revising the proposed "Principles," and under date of September 10, 1958, the Director of the Bureau of the Budget issued the "Principles" as Circular No. A-21.

In transmitting Circular No. A-21 "to the heads of executive departments and establishments," the Director of the Bureau of the Budget stated: "This circular provides the basis for a uniform approach to the problem of costing research and development performed by educational institutions under grants from and contracts with the Federal Government. The principles and related policy guides provided herein are designed for governmentwide use. All Federal agencies that sponsor research and development work at educational institutions are requested to apply these principles and related policy guides to the fullest extent practicable in determining the amounts to be authorized under

grants or contracts for such work and in developing budget estimates therefor."

The Director of the Bureau of the Budget also stated in his letter transmitting Circular No. A-21 that "the objective of this circular and its attachments is to provide to educational institutions recognition of their full allocated costs of research under generally accepted cost accounting principles. Alternative methods are specified as permissible in unusual circumstances or to prevent inequities. No provision for profit or other increment above cost is intended."

As one of the representatives of the American Council on Education who was privileged to work with the Interagency Committee on this problem, I can state with assurance that "no provision for profit or other increment above cost" is permitted under the cost "Principles" embodied in Circular No. A-21. Experience may well demonstrate that the "Principles" are too restrictive and do not in fact "provide to educational institutions recognition of their full allocated costs of research." Nevertheless, we trust that all Federal agencies which sponsor research and development in educational institutions will accept the "Principles" and implement the related policy guides incorporated in Circular No. A-21.

Among the general provisions of the conference report on the appropriation bill providing funds to the Department of Health, Education, and Welfare for the fiscal year 1959 was included amendment No. 54, which reads as follows: "Inserts language proposed by the House and stricken by the Senate which limits the amount that may be paid to cover indirect costs. The manager on the part of both the House and the Senate agreed to the restoration of this limitation with the understanding that the question of changing such limitation was being deferred due to the fact that the Interagency Committee composed of representatives of the agencies of the Federal Government most concerned with this matter have not yet made their final report."

As has already been noted, the Director of the Bureau of the Budget has requested all Federal agencies that sponsor research and development work in educational institutions to apply the "Principles" and related policy guides incorporated in Circular No. A-21. We, therefore, respectfully request that the 15 percent limitation on indirect costs be omitted from the legislation covering future appropriations to the Department of Health, Education, and Welfare.

STATEMENT OF DR. PHILIP HANDLER, PROFESSOR AND CHAIRMAN, DEPARTMENT OF BIOCHEMISTRY, DUKE UNIVERSITY AND MEM- BER, NATIONAL ADVISORY HEALTH COUNCIL, PHS

GENERAL STATEMENT

Senator HILL. Now, Dr. Philip Handler, professor and chairman, Department of Biochemistry, Duke University, and member, National Advisory Health Council, PHS; and Dr. Lewis Thomas, professor of medicine, New York University Medical School, director, third and fourth medical divisions, Bellevue Hospital, New York, and member, Pathology Training Commission, NIH.

Gentlemen, we are delighted to have you here. You may have a seat now and proceed in your own way. We are glad to have you proceed, sir.

Dr. HANDLER. Thank you very much, Senator Hill. It is a great privilege to be here and a privilege to be able to present this statement. You have, I believe, a copy of the prepared statement for the record.

PREPARED STATEMENT

Senator HILL. Yes, we do. We will put this in full in the record, and you then proceed in your own way.

(The statement referred to follows:)

STATEMENT OF DR. PHILIP HANDLER, REPRESENTING THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

(Dr. Handler is professor and chairman of the Department of Biochemistry at Duke University School of Medicine. He is a member of the National Advisory Health Council, a member of the executive committee of the board of the Federation of American Societies for Experimental Biology, member of the council of the American Society of Biological Chemists, coauthor of a widely used textbook of biochemistry for medical students, and of 135 publications in scientific and medical journals)

Mr. Chairman, honored members of the committee, may I express my sincere appreciation for this opportunity to discuss with you the budgetary appropriation for the Division of General Medical Sciences of the National Institutes of Health, found under the appropriation title of "General research and services." The membership of the Federation of American Societies for Experimental Biology believe that this appropriation should be markedly increased for fiscal year 1960, and I have been asked to explain this request.

Since their founding, the extramural programs of each of the categorical disease Institutes of the National Institutes of Health have provided funds for research in their respective disease entities and for the training of investigators in such research. For several years there was also carried in the budget of the National Institutes of Health, within the appropriation for "General research services," a relatively small sum which was used to support research of a fundamental biological nature but which did not bear directly, in an immediately obvious fashion, on the specific disease entities for which the various National Institutes has been given responsibility, nor, indeed, on any specific known disease. A small fraction of the extramural research funds available to each of the Institute Councils had also been devoted to support of such research, particularly when the Council and appropriate study sections could envision the time when the information to be procured might have a more direct bearing on the problems of the specific disease. Last year the Congress wisely increased the appropriation for "General research and services" to about \$26 million. The increase over the previous year, about \$13 million, was to be devoted to support fundamental research projects and for the creation of training programs in the basic medical and biological sciences.

To administer these funds there was created within the National Institutes of Health the Division of General Medical Sciences which, together with the National Advisory Health Council, was given responsibility for the new programs made possible by this appropriation. In effect, therefore, this new Division became an Institute with an extramural but no intramural program. Since this Division has been in operation for less than a year, I should like to tell you a few words about its operation.

Research grants programs of the Division of General Medical Sciences

Research projects in the sciences basic to medicine, previously supported by the Division of Research Grants, are now sponsored by the General Research Grants Branch of the Division of General Medical Sciences. This program is considerably wider in scope than that supported by any of the categorical Institutes. For example, during the current year, the Division has supported investigations in biochemistry, bacteriology, virology, genetics, chemistry, general biology, enzymology, endocrinology, pathology, morphology, pharmacology, physiology, toxicology, hematology, dermatology, physics, epidemiology, biometry, and anatomy. Research in these areas was supported by approximately two-thirds of the total funds appropriated to the Division for its research program. Without exception, all of these investigations are fundamental in character, i.e., these are studies directed toward obtaining a deeper understanding of the nature of living things. Such studies are properly supported and, indeed, must be supported within the National Institutes of Health since they provide the information and techniques which others apply to studies of disease.

A more specific, detailed definition of "basic" research is not particularly useful, and such discussions only degenerate into an exercise in semantics. I am certain that sophisticated scientists would all agree with Surgeon General Burney, who recently quoted Dr. H. A. Shepard as follows: "Efforts to define basic research operationally are misleading and bring about neglect of the forces that produce it—the training, discipline, values, way of life, and system of social control that

motivate men to advance knowledge for its own sakes. * * * Support of basic research means support of a social system which so motivates men."

But the fact that the prime motivation of those engaged in fundamental research is their own curiosity and, perhaps, only secondarily a desire to benefit their fellow men, does not militate against support of their research. On the contrary, it serves only to assure us that such investigators will extend their utmost efforts in seeking to find answers to the questions which they have raised. The entire history of medicine is witness to the fact that medical progress has been based almost exclusively upon the findings of those engaged in basic research. For medicine itself is but the application of such information to the diagnosis and treatment of human ailments. When I appeared before this committee last year I attempted to document this concept in extenso. Accordingly, this year it should suffice merely to call your attention to the most recent evidences of the validity of this concept.

The Nobel Prize Committee has been well aware of the importance of fundamental research and this has been evident from the selections they have made over the years. In 1958, the Nobel Prize in medicine was shared among three American geneticists. The prizes were awarded for the research which these gentlemen had conducted with ordinary bread mold and with various species of nonpathogenic bacteria. But it was their elegant research on these lowly organisms which has provided a sound underpinning for our understanding of the operation of hereditary disease in man. Specifically, they demonstrated that the biological responsibility of a gene, the fundamental operating unit within the chromosome which transmits genetic character, is to make possible the synthesis of one specific protein. Each specific chemical reaction which occurs within the body, and there are thousands, is conducted under the influence of a specific protein called an enzyme. An imperfect gene results in formation of an imperfect enzyme or, if the gene be lacking, the enzyme is not formed at all. In either case, the chemical reaction for which this specific enzyme is responsible cannot occur and disease results. Such is the basis for all hereditary disease. I would remind you that in the last few years several dozen previously unrecognized hereditary diseases have been found among our population. In a recent review by Dr. Lawrence Snyder, erstwhile professor of medical genetics at Ohio State University, he mentions no less than 48 hereditary diseases in which the exact biochemical defect has been demonstrated and this list is by no means complete. Thus, the work for which the Nobel Prize in medicine was awarded last year permitted our deeper understanding of one of the most fundamental aspects of living things, the mechanism of genetic transmission. At the same time, it has illuminated for us a large segment of those diseases to which man is subject. Armed with this information, those who address themselves to the problems of human disease may proceed with increased confidence that they truly understand wherein the abnormal differs from the normal. All thoughtful investigators of biology and of disease will share Dr. Snyder's conclusion that "The union of biochemistry and genetics offers a rational approach to diagnosis, prevention, and therapy."

At the risk of belaboring the self-evident, may I note just a few other examples of this process wherein relatively obscure basic research led ultimately to important advances in medicine. Consider the long development of electrophoretic techniques for protein separation necessary to recognition of the nature of sickle cell anemia; the observation of a factor in green leaves necessary for nutrition of various bacilli which led to recognition of the significance of folic acid in human nutrition and thus in turn to the antifolic compounds now being studied in cancer chemotherapy; the recognition of an enzyme in erythrocytes necessary for the metabolism of carbon dioxide so that study of inhibitors of this enzyme provided the marvelous drugs now being employed so effectively in glaucoma and edematous states; the multitudinous studies of the mechanisms of immunity, of the nature of viruses, and of the culture of animal cells required before preparation of an antipoliomyelitis vaccine could be undertaken; the years of feeding rats, dogs, chickens, and guinea pigs which brought our knowledge of nutrition to the point that, from the standpoint of medicine, no one need ever die of nutritional insufficiency; or the years of animal experimentation and chemical research which provided us with cortisone, aldosterone, and their more powerful synthetic derivatives. The cost of such research has been repaid to society many times over. And it is just such research which is supported by the programs of the Division of General Medical Sciences.

In addition, this Division has been given responsibility for a number of other ongoing programs previously supported in lesser degree at the National Institutes of Health. These include a program of investigation in air pollution, food technology, water pollution, radiation as a factor in environmental health, nursing, accident prevention, and research in the biological, physical, psychological, and social aspects of human aging. The potential significance of these programs is immediately apparent.

Training programs

The general research training grants program, previously established in the Division of Research Grants, is now centered in the Research Training Grants Branch, Division of General Medical Sciences. This program was initially supported by special funds made available to the Division through the seven categorical National Institutes and was amplified with the aid of the increased appropriation made available by the Congress for fiscal year 1959. The initial program was in the fields of biometry and epidemiology. This program has since been expanded to include research training in such fields as the anatomical sciences, biochemistry, genetics, pharmacology, physiology, experimental pathology, cell biology, and experimental embryology and development.

It would be difficult to convey to you the enthusiasm among knowledgeable and responsible medical scientists which has been evoked by the announcement of this program. The roster of the directors of the training programs initiated this year reads like a "Who's Who" of the elite of American medical and biological science. No program of the NIH has even been more warmly welcomed with cries of "Now we can do what the country expects of us." Sound, fruitful, fundamental research can only be conducted by those who have undergone long and rigorous training in one of the basic scientific disciplines. However, such investigators have been in short supply for some time and the scientists of our country have enthusiastically greeted this program which will enable them to enhance that supply.

In addition, the training grants program of the Division also offers various fellowship awards for research training. These include (1) regular fellowships at the predoctoral, postdoctoral, and special levels; (2) part-time fellowships to medical, dental, nursing, and public health students; (3) postsophomore fellowships to medical and dental students for a year or more; (4) postdoctoral fellowships to scientists from other countries; (5) senior research fellowships. Now in its third year of operation, the senior research fellowship program, which was initially administered by the Division of Research Grants, was transferred to the Division of General Medical Sciences during 1958. During the past year the Congress authorized \$1 million in increased appropriations, bringing the level of the program available annually to \$2,500,000. In view of the fact that the program supports training in all of the preclinical, medical, dental, and public health fields, the fellowships program spans the research training interests of all of the National Institutes and Research Divisions at the National Institutes of Health.

These have been exciting and rewarding beginnings. The Congress, the staff of the National Institutes of Health, our scientists, and our country have reason to be satisfied and, indeed, proud of the progress which has been made. But they are only beginnings. Clearly, it is in the national interest to increase our supply of fundamental knowledge at the most rapid rate commensurate with our available supply of trained scientists and adequately equipped laboratories while at the same time taking every possible measure to enlarge our supply of both laboratories and scientists for the future. It is no exaggeration to state that biology and medicine stand on the threshold of a great golden age which can do as much for man's health and personal welfare tomorrow as the advances in physics and chemistry provide today in creature comforts, convenience, and improved working conditions. Indeed, even now there is a glimpse of the future. One can readily envision control of genetic disorders, of the diseases of connective tissue, of endocrine imbalances, of heart disease, and of virus infections in the not too distant future if we can continue to forge ahead in our understanding of the biology basic to these problems, just as our understanding of the problems involved in tissue transplantation and neoplasia has deepened. It would be rash to promise easy or swift solutions, but it would also be blindness to fail to recognize the potentialities for human welfare in the harvest of fundamental research. We have only to imagine the vast human and economic return if we could add to the life of each of our citizens but 1 more year of active life in which they would be a burden neither to themselves nor to society. However, to make this possible will require an increased ex-

penditure of funds for fundamental research training therein, and it is just this which brings me before you.

Please understand that this request does not merely reflect the vested interests of a group desiring to enlarge or embellish its own activities. As practical and hard minded a group as the board of directors of the Pharmaceutical Manufacturers Association have made essentially the same statement. At their meeting in New York City on January 8 of this year they urged the adoption of a set of three principles of which two are particularly germane to this discussion. These are—

1. "Since our further progress in medicine directly depends upon the supply of highly qualified scientists, the training of additional teachers and research personnel should have highest priority.

2. "Government funds should be principally allocated to basic research objectives, to expand our fundamental knowledge in all medical fields rather than to applied research and development."

So that it will not seem that these two principles have been taken out of context, let me quote also their third principle, namely:

3. "Except in unusual circumstances, Government funds should therefore be allocated to nonprofit institutions such as medical schools, hospitals, and research institutions rather than to private industry. Private industry should be subsidized only in cases when no nonprofit organization can do the job. In such exceptional cases, however, full cooperation can be expected from a pharmaceutical firm approached by the Federal Government because of its unique qualifications."

To the best of my knowledge, principle 3 has always been in effect in the operation of the National Institutes of Health.

We seek, therefore, to enlarge our basic supply of fundamental knowledge so that those whose efforts are directed in a more immediate sense to the understanding and alleviation of human disease may be better armed for their tasks. In order to do so a vigorous program is imperative and several aspects must be phased in as our national resources of adequately trained brains and properly equipped laboratories permit. These phases are:

1. Support of investigators of demonstrated competence now on the faculties and staffs of our medical schools, biology departments, research institutes, etc.

2. Additions to this group of available well-trained new personnel who will, in their turn, require research support.

3. Training of talented college graduates and physicians in the specialized disciplines with which we are here concerned.

4. Arousing the interest of our college youth in the possibilities of a career in fundamental research in medical and biological science.

Let us consider these in turn.

REQUEST FOR FISCAL YEAR 1960

(1) *Noncategorical research grants.*—We have complete confidence that an increase in the appropriation for the noncategorical research grant program to \$24 million for fiscal year 1960 can be wisely administered. On March 25 there was a backlog of about 150 approved applications totaling \$2,080,000 for meritorious fundamental research. If the Budget Bureau releases the \$1,285,000 budgeted but unprogramed for this area, the backlog will be reduced to \$795,000 or 60 grants. Unless this appropriation is increased, few new projects can be activated in fiscal year 1960. But the program is new, and the rate of application increases steadily. It is clear that we must expect a marked upsurge of activity in the fields of genetics, embryology, cell biology, environmental health, ageing, and accident prevention. The present request for a total of \$24 million in this category will permit activation of about 400 new projects including those approved but unpayable this year. It should be noted that research in environmental health, accident prevention, and cell biology is, of its very nature, more expensive than is research in other areas. The impact of the initiation of this program has scarcely been felt and excellent applications are arriving at an ever-increasing pace. Particularly heartwarming and revealing is the number of these applications which emanate from qualified scientists on the faculties of our Colleges of Liberal Arts and Sciences where research without external financial support cannot be considered. Withal, the study section and the National Advisory Health Council will renew their pledge never to lower their

standards nor to award funds for inferior projects or to ill-qualified investigators, regardless of the magnitude of available funds. As former chairman of one study section and a member of the National Advisory Health Council, I can assure you that these devoted scientists would find any other course of action entirely repugnant. May I remind you once again that it is this research in the sciences fundamental to medicine which feeds information and techniques to those who are more directly concerned with the problems of disease and whose research is supported through the various categorical Institutes.

(2) *Senior research fellowships.*—The research fellowships program administered by the Division should be expanded and we request an increased appropriation to a total of \$5,750,000. The research training programs of the National Institutes of Health, slowly in the past and, we hope, more rapidly in the future, have been creating an increasing body of competent, trained investigators but our universities are not in financial position to accept these scientists onto their faculties. We have been assured that almost every American medical school can accept an appreciable number of these carefully trained and selected senior research fellows. In fiscal year 1959, 80 candidates for such fellowships were appointed from 160 nominees submitted by the universities. It should be fully realized that those candidates declined for lack of funds were considered, by their universities, to be well-qualified and worthy of addition to their faculties. With the growth of our other training and fellowships programs, the senior research fellowships program must also be expanded to provide positions for the most worthy products of these programs. It is they who will become the senior investigators and teachers of tomorrow. Accordingly, we earnestly suggest that \$3 million be appropriated for the senior research fellowships program in fiscal year 1960. Similarly, a significant increase is warranted for the regular and special fellowships program of the Division. A heartwarming trend which augurs well for the future is the increasing number of applications from physicians who have completed their postdoctoral residency training and seek financial assistance to enable them to spend a year or two in intensive research training in a laboratory engaged in research in one of the sciences basic to medicine. These men have invested heavily in their time and financial resources and desire only to prepare themselves more adequately for a research career. The data available suggest that an increased appropriation in a total amount of \$2,250,000 for fiscal year 1960 would permit sound and conservative support of this program.

(3) *Training programs in the basic medical sciences at the graduate level.*—An increased support of the training grants programs in a total amount of \$15,890,000 would still not suffice to support all of the worthy applications which are expected to arrive at the NIH in this fiscal year, based on the information presently available. The appropriation for the training grants program made last year is now fully committed and there are on hand \$2,200,000 of excellent approved but unpayable applications plus about \$750,000 of incompletely processed applications of similar caliber. Unless the appropriation is increased, no funds will be available for these and other new applications. Yet we are aware of the fact that scores of those departments and institutions capable of maintaining or inaugurating training programs of a superior quality have not yet sought support, although many have indicated that they are currently surveying their resources preparatory to submission of applications. Data furnished by the NIH staff to the National Advisory Health Council project receipt of a total of \$11 million in new applications during fiscal year 1960. Assuming an approval rate of 60 percent support of this program requires \$2,950,000 plus \$6,600,000 of additional funds for fiscal year 1960. We strongly feel that this program should be encouraged to grow as vigorously as possible. However, because, at the present time, the supply of both students and competent investigators to train them is limited, and because of the need for long-range planning and new construction, this request is held to a level somewhat below that which we consider compatible with the present training capacity of the country. The program must be carefully observed and reviewed annually and then supported to an extent commensurate with our needs and our capacity to utilize such funds wisely. If I may interject a personal opinion, may I say that it would not surprise me if, a few years hence, this program becomes the largest single item in the extramural budget of the NIH since the need for such programs is so great and because funds made available in this way to the largest coherent research unit within a given institution, a disciplinary department, are maximally useful.

(4) *Training and research programs at the college level.*—An increasing number of our bright young people must be attracted into biological and medical research of this sort by all means available. More adequate use, both for training and research, must be made of the well-trained members of the faculty of institutions which do not themselves operate medical schools. In this connection, we very much hope to inaugurate a small experimental program of research training grants in colleges of liberal arts and sciences. Each of these would be focused around a professor or group of professors of demonstrated competence and adequate training, teachers whose time currently is largely spent in the routine operation of a liberal arts and sciences curriculum. This is a mine of talent which has scarcely been tapped. We are confident that the activities of such a program will arouse the enthusiasm of the youngsters involved and motivate many to go on to further training. An appropriation of \$300,000 to explore the feasibility and merits of a few such pilot programs is sincerely requested.

(5) *Research manpower—recruitment and study.*—The necessity for recruitment of talented young people into fundamental medical research arises from the acute shortages noted by the faculties and staffs of our medical schools and research institutions. The funds requested above would make possible creation of the machinery for alleviating these shortages. But two aspects of this problem remain unresolved. On the one hand, we require a standing arrangement which will permit continuous monitoring and assessment of the manpower needs in each disciplinary area. On the other hand, having established our training program, it is necessary to attract young people to enter such programs and embark on a career in fundamental medical research. Many of the professional societies in this area, such as those which are members of the Federation of American Societies for Experimental Biology, the American Association of Anatomists, the Society of American Bacteriologists, etc., have standing committees on professional training. These societies have repeatedly expressed their willingness and desire to undertake both these tasks, recruitment of young people, and continuous survey of manpower requirements, including assessment of the efficacy and impact of on-going training programs. It is warmly recommended that a sum of the order of \$100,000 be made available to support such activities. This will be of enormous assistance both in providing guidelines for the distribution of funds in our training programs and in insuring a supply of bright young minds to enter these programs.

(6) *Recommendation concerning the staff of the National Institutes of Health.*—This item is presented as a purely personal opinion, and has not been formally endorsed either by my colleagues of the National Advisory Health Council or on the Board of the Federation of American Societies for Experimental Biology. However, those of us who have had frequent contact with the staff of the National Institutes of Health have developed an ever-increasing admiration for their devotion, energy, and wisdom. Whereas the Congress has from time to time authorized increasing numbers of supergrade positions among the scientific staff of the Institutes, this has not been done for the administrative staff. Yet among the latter are a number of remarkably capable administrators whose talents are manifest in the efficiency and dispatch with which the programs of the Institutes are conducted. These men are becoming increasingly well known in other circles as well, and in the near future will be in receipt of an increasing number of offers to lure them to positions elsewhere. This would be a great blow to the programs of the National Institutes of Health. Accordingly, I and many of my colleagues with whom I have discussed this question would like to recommend to you creation of a small number of additional supergrade positions for the administrative professional staff of the extramural programs of the National Institutes of Health.

(7) *Research facilities construction.*—It is well known to this committee that our medical schools and other research institutions are not in financial position, from their own resources, to provide our country with the additional research facilities which we so badly need. The recommendation of the administration to reduce by \$10 million the sum available for new construction in fiscal year 1960 appears, to responsible scientists and university administrators, to be a serious error in judgment. We strongly urge that for fiscal year 1960 the Congress provide the full \$30 million originally authorized for this purpose.

Appended hereto is a suggested budget for the Division of General Medical Sciences for fiscal year 1960. This budget was also recommended to the appropriate committee of the House of Representatives. The budget approved by the House provided for fiscal year 1960 an increase of \$7,430,000 above the budget

authorized for fiscal year 1959 for the Division of General Medical Sciences. This is patent evidence that the chairman of the House committee and his colleagues also subscribe to the concepts and philosophy here presented. Our country should indeed be grateful for the care, thought, knowledge, and wisdom with which they considered these problems. Their recommendation clearly represents a sincere attempt to support fundamental research in the fields basic to medicine within the limits of reasonable total financial operation of our Government. I trust that you will understand that it is our firm conviction that the budget presented herewith is in no sense padded but represents a careful, honest estimate of what can be done with our current national resources of manpower and facilities. Indeed, we have deliberately attempted to set our sights somewhat below such a level of expenditure and we earnestly request that these figures be considered for what they are, a realistic appraisal of our country's needs and the extent to which they can be satisfied during fiscal year 1960.

Thus, we come before you to request the funds which would permit our Nation to mount these programs, at an optimal rate commensurate with all of our national resources—trained investigators, existing laboratories, and talented youth. The pace and success of medical research tomorrow depend upon your support of research and training in the fundamental and biological sciences today.

SUMMARY

Requested budget for Division of General Medical Sciences, fiscal year 1960

Item	Fiscal year 1959	Fiscal year 1960
Research grants:		
Committed in fiscal year 1959.....	\$16, 125, 000	\$16, 125, 000
Approved but unpayable.....		750, 000
Projected new applications at 60 percent approval.....		7, 125, 000
Subtotal.....		24, 000, 000
Research training grants:		
Committed in fiscal year 1959.....	6, 040, 000	6, 040, 000
Approved but unpayable.....		2, 200, 000
Current deferrals at 75 percent approval.....		750, 000
Projected new applications at 60 percent approval.....		6, 600, 000
Experimental training grants in liberal arts colleges.....	0	300, 000
Recruitment and continuing survey of manpower.....	0	100, 000
Subtotal.....		15, 990, 000
Fellowships:		
Senior research fellows.....	2, 000, 000	3, 000, 000
Regular, special, part time.....	1, 260, 000	2, 250, 000
Research traineeships in basic sciences for mature clinicians.....	0	500, 000
Subtotal.....		5, 750, 000
Total.....	24, 425, 000	45, 740, 000

GENERAL STATEMENT

Dr. HANDLER. In that case I have no notes and will speak as we go along.

Senator HILL. It is not a very lengthy statement, so you just proceed in your own way. Read it all if you wish to.

Dr. HANDLER. No. I prefer to just proceed as we go along.

Senator HILL. Excuse me 1 minute. I notice you gave a brief little biographical sketch. We will have your full designation go in the record.

SERIOUSNESS OF INDIRECT COST PROBLEM

Dr. HANDLER. I wish first as a scientist to endorse the sentiments expressed by Dr. Berson. I feel sure all scientists working in our medical centers fully concur with the sentiments.

The problems are quite real, and if we had the time, I should like to tell you the impact of this problem on my own medical school. I think Dr. Berson has done an excellent job, and I will not take your time to do more on that.

Senator HILL. In other words, you concur in what he said?

Dr. HANDLER. Entirely, sir. I want to emphasize one facet.

Senator HILL. You feel the case that he presented here today is serious?

Dr. HANDLER. It becomes more serious every day, sir.

At Duke University we have a simple problem of having constructed since the war a medical research building which is exactly the size of a football field and four stories high. Approximately 24 percent of the funds were derived from the National Institutes of Health for the construction.

Senator HILL. Yes.

Dr. HANDLER. But this raised the problem we had not anticipated. For example, we have a powerhouse that feeds steam to all of our buildings. When this construction began, we had one boiler going and one boiler in reserve and yet another one just lying idle. Now all three are going full tilt and this building may not be expanded again until we provide more power. This is an indirect consequence of this increased activity and these costs are never anticipated in the ordinary reckoning of the cost of research, but they are quite real to the university.

I cite this as but one example which, in fact, at our institution will deter any additional construction until this problem is solved and it derives from our own research activities. Such costs are related to research activities and are institutional responsibilities just as much as the parking spaces we must provide around this building, and so forth.

Senator HILL. In other words, as we have increased medical research, we have increased the burden on the medical schools.

Dr. HANDLER. And in so doing, upon the parent university.

Senator HILL. That means the whole university system, really.

Dr. HANDLER. Yes. With limited funds we must establish priorities and this, therefore, may injure some other ongoing program of the university—which I am certain was not the intent of the Congress in making research possible.

GENERAL MEDICAL SCIENCES

You may recall, sir, that last year I appeared before your committee with respect to the problem of funds for general medical research as it is supported at the National Institutes of Health. The specific appropriation title to which we were speaking at the time was that called "General research and services." The Congress generously listened to our testimony and provided a sum which made possible the creation of a new administrative unit at the NIH. It is called the "Division of General Medical Sciences." I think it is perhaps worthwhile to take a few minutes to tell you what has been done with the funds so provided.

Senator HILL. We would be very much interested. I know in general what has been done with those increased funds we gave you.

Dr. HANDLER. In general, the funds have gone into two areas. The first of these has been increased support of fundamental medical research. Defining fundamental research is a very difficult thing. There is current among scientists a simple definition. It states that when two scientists met, one of them said: "The definition is simple. What I do is fundamental research and what you do is applied." I don't think they should be taken very seriously.

Essentially, however, what we mean is that this is research designed to better understand living things. This is very important for all of us. It has been the result of such research over the years which has taken medicine out of the Dark Ages. It has been this increased understanding of the nature of the human body, and its functioning which makes possible intelligent application of these findings and this is called the practice of medicine.

WORK UNDER FUNDS PROVIDED

With the funds which were provided last year, approximately two-thirds were placed in an increased program of support of general medical sciences. The scope of this program is far greater than that of any other program anywhere within the National Institutes of Health.

If I may, I should like simply to list the fields which are so supported. They include fundamental research in biochemistry, embryology, genetics, chemistry, general biology, enzymology, endocrinology, pathology, morphology, pharmacology, physiology, toxicology, hematology, dermatology, physics, surgery, epidemiology, biometry, anatomy, and so forth.

It is in these broad approaches to the nature of living things that these funds have gone.

All told, several hundred new projects have been initiated. I do not have the exact figures before me with these funds. It is too early, obviously, to cite the results of these new investigations. They have only been in progress now for less than half a year since the money has actually been made available. So we cannot cite the specific results at this time.

But the program of research and the funds in this area have been welcomed extremely warmly by the scientists of our country.

This is exactly the kind of work that the responsible scientist knows underlies what is to come in medical practice and the opportunity to do this kind of work has been received most warmly around the country.

WORK IN OTHER AREAS

I would like to point out: In addition, there are several other on-going programs which are supported from these same funds in areas which are not quite so fundamental in nature. These include environmental health—including air pollution, water pollution, food technology, and more recently the problems created for all of us by the radiation fallout problem.

The funds also have been used in part for our program of nursing research. This has given us great concern. It is difficult to define what nursing research truly is or what shall be done thereby. But as I have gathered in talking with the leaders of this program and in

going over the many projects in this area, essentially they have a simple philosophy. They assume that perhaps the shortage of trained nurses will be with us indefinitely, and it is almost impossible to provide the necessary supply of trained nurses. The problem, therefore, arises as to how best provide adequate nursing care in a world which is short of nurses. Which of the health problems can the trained nurse handle uniquely well? Which of these chores indispensable to nursing care can be delegated to someone with lesser training? How under these circumstances can they provide to the hospitalized patient the one item which only the trained nurse can provide? This is tender loving care. And the object of most of these projects is to have another look at hospital practice and see how to improve nursing care in a world which is short of nurses.

The program of accident prevention research is also financed from the funds made available through this definition of general medical sciences. In toto, therefore, this is probably the broadest single program in all of the National Institutes of Health. The results of some areas are not encouraging. In others it seems to have a lag.

There is one variety of research particularly that I should like to take a few minutes to talk about because I should like, if you would, to share a dream with you.

GENETIC DISEASES

A man has always dreamed of understanding himself. At this moment in history the likelihood of our doing so in the reasonably near future is greater than it has ever been before. The notion that substantiates this concept arises from recent research in genetics. This is undoubtedly the most exciting development in all of biology and medicine at the present time. And this research is done in many different places in quite different ways.

On the one hand, we have only very recently become aware of the incidence of genetic diseases among our own population and in that statement I cite a review by one of our foremost geneticists, who, in passing, listed no less than 48 independently transmitted diseases in which the exact difficulty is actually known.

A few years ago people talked about the fact that some diseases were inherited. We knew about hemophilia many years ago. But the actual recognition of specific disorders and specifically what they are and how the disease is transferred is a completely new notion in medicine. We have good reason to expect that there will be many more, now that we know how to look for them.

At the same time those who are engaged in studies of genetic mechanisms have come remarkably close to understanding genetics itself, the actual intimate details by which the minute amount of solid material in the nucleus of a sperm or an egg cell provides the information which later will be coded in some fashion and transmitted into information which is used to create a man. The actual material has been studied in detail so that we now have a good working notion of what a gene truly is—not only know what it is but how it reproduces, how one gene benefits another gene.

This understanding has come about by the work of literally dozens of investigators in laboratories all over the country and abroad as well. These people sometimes are called geneticists, sometimes biophysicists, sometimes microbiologists, and sometimes biochemists.

But the combination of all of these skills is remarkably important for our future.

For the first time we are likely to understand in some measure the control of genetic disorders and, sir, these constitute a major group of killers and cripples of our present time.

It is not too soon to begin working on this problem. It is this area particularly which the Division of General Medical Sciences has been fostering since its inception.

Senator HILL. A very interesting statement, Dr. Handler.

Dr. HANDLER. Thank you, sir.

PROBLEM OF AGING

One other area which also allied is the problem of aging. The various studies of aging now performed under the aegis of the NIH also come through the Division of General Medical Sciences. Here we support work—I say “we” as a member of the National Advisory Health Council—support work in various aspects of the aging process. On the one hand there are those investigators who seek to understand why an animal must of necessity age—the basic biology of this process. What are the “clocks,” the time dependent processes which determine the fact that a mouse lives 2 years and a rat 4, and a man 3 score and 10. We really do not know what these “clocks” are yet, but there are many investigations going on designed to determine. On the other hand there are those investigations designed to understand better how to provide medical care for an aging population. Then there is the third group, which are best described as sociologic and psychologic—those designed to provide us with better means of making it possible for our aging population to live better and more productively in their old age. To contend more effectively with the circumstances in which they find themselves and maximize their own living.

I would point out, sir, that if the results of this program would make it possible for each American to enjoy 1 more year of active life, a year in which he is not a burden to himself or to society, the human return is incalculable; the financial return is enormous. This is not a promise which we can make as yet but we can hope.

BASIC SCIENCE TRAINING ALONG DISCIPLINARY LINES

Of equal importance—these funds have been used to create training programs in research organized along disciplinary lines. You will recall that since the inception of the National Institutes of Health there have been training programs in various disorders—cancer, heart disease, arthritis, and metabolic disease, mental health, and so forth. With the funds which the Congress provided last year there have been created training programs designed to produce investigators specifically trained in biochemistry, genetics, epidemiology, biometry, experimental pathology, and various others. Now, it is investigators so trained who will do tomorrow’s research. When an investigator studies heart disease he must approach it from some scientific standpoint. You must come to the problem as a well-trained biochemist or physiologist or pharmacologist—whatever the particu-

lar approach may be. But the training to be effective must be along disciplinary lines.

These funds, specifically, have been welcomed more enthusiastically than any program the National Institutes of Health has yet sponsored. I have been to meetings of some of the training directors, the gentlemen in whose names such grants have been awarded. Technically speaking, of course, all such awards are made to institutions in which these scientists hold distinguished professorships. It was most heartening to listen to the comments of these gentlemen; essentially what they say is, "Now we can do what we have always wanted to do in order to train new investigators." Much training has been done over the years assisted by grants originally made for research purposes but young men drawn into such research have not always received adequate training. This cannot be denied; however, the incidental training available through research grants has been extremely important. Now for the first time there are funds which would improve the quality of training and it is these specific research training funds which I think are almost invaluable in our time. If we are to have more medical schools one day in the future, if the estimate that we need 20 new schools by 1970 is correct and I am in no position to evaluate that estimate, somewhere we must find the faculty for those schools. That faculty will most certainly be produced by these training programs.

Senator HILL. You put your hands on a very important thing there which I am sure Dr. Berson—I see he is shaking his head now—is in full agreement.

Dr. HANDLER. That is right.

Senator HILL. We are talking about students, needing more schools, in substance the enlargement of present schools.

Dr. HANDLER. Yes.

Senator HILL. You have this terrific problem there of no faculty.

TWO APPROACHES TO THE FACULTY PROBLEM

Dr. HANDLER. There are two approaches, we can either increase capacity of current schools or create new ones. In either case we need more faculty; these scientists cannot be found simply by appropriating money the day you need the faculty. They must be trained well in advance so that they will exist. This is what is being done now with these training funds.

Senator HILL. In other words, it is going to take time now to train and get these teachers.

Dr. HANDLER. Yes, sir.

Senator HILL. I see again Dr. Berson is agreeing wholeheartedly with you.

Dr. HANDLER. That is right.

Senator HILL. I see; he is my dean.

Dr. HANDLER. Your dean?

Senator HILL. He is my dean. University of Alabama. He is my dean.

Dr. HANDLER. From what I hear he is an excellent dean.

Senator HILL. He is, indeed. He is, indeed.

RESEARCH FELLOWSHIPS OF THE DIVISION OF GENERAL MEDICAL SCIENCES

Dr. HANDLER. One other aspect of the program should be mentioned and that is the Division of General Medical Sciences, like the categorical institutes has responsibility for a research fellowship program. This program differs from other Institute fellowship programs because of the presence of the special senior fellowships. This special program was created by the Congress 3 years ago, I believe, and has done yeoman service in the time since. These are the fellows who having come through the regular fellowships program are now ready to be the junior faculty and begin their own careers. Last year I attended a meeting of the training committee which make these selections and they had a very difficult time because of the outstanding excellence of all candidates. They chose 80 men and women from among 160-odd candidates but those who were not selected as far as I could tell really were almost as good as those who were. These candidates all were endorsed by the immediate faculties of their own institutions. These institutions were ready to take these people on their junior staff if the funds were provided. We hope that additional funds can be provided for this program which is now very well along.

HOUSE RECOMMENDATIONS

I testified before Congressman Fogarty's committee and was received most pleasantly; I am entirely grateful to him for the excellent hearing which was given us. The full House has recommended an increase in this budget of 7.43 millions. If this increment, for which we are quite grateful, were to remain we could not quite accomplish that which we would like to do next year. At the House level only 40 percent of the new scientifically approved applications which are expected for next year will be paid. We assume roughly a 50 to 60 percent approval rate and of those only about 40 percent will be payable at this level of appropriations. The situation with regard to the training program is much more serious. In that instance as we enter this fiscal year there are just under 2 million of unpayable but scientifically approved applications which have already come through the National Advisory Health Council.

There are now in the office at the National Institutes of Health, as I was told yesterday at the meeting of the Planning Committee of the Health Council, sufficient research training grant applications so that a total of \$12 million will be required to pay them. This assumes a 60 percent approval, based on past experience; I think such an approval is too severe but the scientists serving on these committees have very high standards, indeed.

Senator HILL. You are speaking of the training as well as the other?

Dr. HANDLER. I am speaking only of the training program.

Senator HILL. Only of the training programs, sir.

Dr. HANDLER. Let me go back over this list. In fiscal 1958 there were \$2,960,000 available to this program. This money actually had been appropriated to the categorical institutes and made available to the then newborn Division of General Medical Science to mount this program. With the funds which the Congress made available last year there were then available a total of \$6,040,000 for the cur-

rent fiscal year. If the House appropriation level were maintained for the next fiscal year there would be available approximately \$9 million. At that level there would be a deficit of \$6 million between approved applications and available funds. That is, we expect to have scientifically approved applications to a total amount of approximately \$15 million. There are now on hand approved applications totaling about \$12 million awaiting the next meeting of the Health Council. We can only project what will happen during the succeeding balance of the fiscal year. Considering the enormous significance of this program it is this particular training grant item which I would like to call to your attention. These training programs are new in the history of the National Institutes of Health. They will provide the investigators for tomorrow, the faculty for expanding medical education tomorrow, and it would be shortsighted to let this program sit still until suddenly we find ourselves requiring new investigators, new teachers and not having them. This particular item is one which I find of the greatest significance in the total program.

Now, there are a few other items which are smaller in nature which I would like to call to your attention if I may, sir.

Senator HILL. Doctor, let me ask you one question.

Dr. HANDLER. Yes, sir.

Senator HILL. According to the table I have here, the House allowed you \$3 million over the budget estimate?

Dr. HANDLER. Yes, sir.

Senator HILL. Training which you have been——

Dr. HANDLER. This would bring the figure from \$6,040,000 to \$9,040,000.

Senator HILL. Yes. How much do you feel that should be increased?

BUDGET RECOMMENDATIONS

Dr. HANDLER. Our recommended figure is on the last sheet of my statement.

Senator HILL. Yes.

Dr. HANDLER. That came to, exclusive of the bottom two items, it would be \$15,500,000.

Senator HILL. \$15,500,000?

Dr. HANDLER. Yes, sir.

Senator HILL. Then what you would need, roughly speaking, would be as you have suggested yourself some \$6 million more?

Dr. HANDLER. Yes, sir.

Senator HILL. Than now in the bill.

ABILITY TO SET UP PROGRAM

Dr. HANDLER. Yes, sir. Now, it might appear that it is almost impossible to mount a program of this scale so rapidly. But in truth this program has come to fulfill a real need, there hadn't been any such programs until this year. The manpower to begin them are available on medical faculties. They can do this job with help. This is evidenced already by the meritorious applications which are before us. And to just quote my statement here, the list of the directors of these training programs is a register of the elite of the American

medical science. These are the folks who hope to be able to forward this program; some of them have already seized the opportunity and now have begun programs. Many others are awaiting to do so when funds become available. This is not quite the same as a research program which must be tooled up *de novo*. These are the people who have done outstanding training before but on a markedly reduced scale and with inadequate facilities. It is entirely feasible to mount this program within this coming fiscal year. Of this I am quite certain, sir.

Senator HILL. If you have funds you are ready to go ahead?

Dr. HANDLER. Yes, sir. There are two smaller items on there and one which I would like to speak to very briefly.

EXPERIMENTAL PROGRAM IN LIBERAL ARTS COLLEGE

One of the items that is shown on that last page as an experimental training grant program in liberal arts colleges. Here perhaps we are on dangerous ground. I am not certain in my own mind to what extent such a program conflicts with the National Science Foundation. To date no programs of the National Institutes of Health have related to undergraduate students in our colleges. But the problem of finding tomorrow's manpower is a very serious one. There have been received at the National Institutes of Health numbers of applications from small colleges which do not have graduate schools, do not have medical schools, asking assistance to mount relatively modest programs in which undergraduate students, who have shown some talent, might receive special training preparing them for careers in modern biological research. The colleges cannot do medical research strictly speaking but can do effective biological research. In each case it is the desire of the institution to develop such a program about one or two unusual members of their own faculty. We have no knowledge of how successful such a program would be. But it is common knowledge that bright youngsters in our colleges are not preparing themselves well for graduate careers in the biological sciences. We would like to find them in the undergraduate schools and interest them in such careers. The research which they would do during such program would probably be relatively secondary to their background scientific training. But finding them and interesting them in such a career is an extremely important thing to do. If this were done on an appropriate scale it would undoubtedly be enormously preductive, though expensive.

What we would like to do with your assistance is to attempt a few experimental trials to see if really this is a useful thing to do, and judge if this is a devise that would be successful. To do this on a national scale would be enormously expensive and we do not dream of bringing such a proposal with as little information as we now have. There are a number of institutions that have made such requests and to date these have been shelved because we have never known whether this is a proper function of the National Institutes of Health. I have discussed this problem with some of the staff at the National Science Foundation and they are not themselves currently contemplating programs of quite this range. So there seems to be no conflict of interest so far as I can determine.

There is yet another aspect of this.

NEW FUNDS INVOLVED

Senator HILL. Doctor, let me ask you a question.

Dr. HANDLER. Yes.

Senator HILL. We are talking now of the figure of \$300,000?

Dr. HANDLER. Yes, sir.

Senator HILL. Is any of this amount of money in the bill now as passed?

Dr. HANDLER. No, sir.

Senator HILL. It is not?

Dr. HANDLER. Yes, sir.

Senator HILL. I want to make it clear. It is new money?

Dr. HANDLER. Yes. As I said earlier, up until now the National Institutes of Health and their staff and the Councils have carefully avoided any program in undergraduate schools. This has never been tried. Largely, I think, because of the fact that this might be a jurisdictional problem at the Science Foundation. Perhaps this might be a proper function of the Science Foundation. But they have not undertaken such programs and as I said, from my discussions with them they have no such intention in the near future.

FUNDS FOR COMMITTEES ON TRAINING

The other items, one which is listed as \$100,000, and this relates to the fact that each of the major professional societies has a standing committee on professional training. These committees have no funds with which to work. Such funds that they have are derived from assessments on their own membership. However, they have the knowledge, the information, and the know-how to perform two or three separate roles for us. We would like them to make accurate assessments, of the real needs for scientists in the next 5 or 10 years.

We all state that we will need new faculty. We will need new investigators, if we can share this dream of what increased knowledge of man can do in tomorrow's world we will require more investigators. But when you ask us to document this statement we have a great difficulty. We do not have the concrete data to provide and state precisely what the current supply is and what we might anticipate for tomorrow. These societies have offered to undertake such a chore and I think it would be extremely useful to make this possible.

Finally, because I have had much too much of your time I would like to make one somewhat personal plea. This appears on page 8 of this statement.

SALARIES FOR ADMINISTRATIVE PERSONNEL

I have been involved in the National Institutes of Health now in one capacity or another for almost 10 years, as a consultant, as a member of a study section, as chairman of a study section, as a member of the Health Council. Over the years I have developed an increasing respect for the professional administrative staff of the extramural programs. Unfortunately, other folk in the world are developing the same respect. They begin to look very attractive to other agencies and these people have begun to receive more and more offers, tending to lure them away from the National Institutes of Health. I would

recommend the creation of a modest number of supergrade positions, I believe that is the proper term, for the more important such individuals. I could name them but I am sure that the staff, Dr. Shannon and his staff can name them even better than I because they watch them on a day-to-day basis. But I suspect that such a measure is necessary lest we lose the services of this group. These are most remarkable, devoted public servants. As I told my colleague, Dr. Thomas, earlier today, there is one whom I shall not name but whom I have twice called from home, once on a Saturday and once on a Sunday and each time the long-distance operator tells me "but that is a Government office and it will be closed" and I say, "No, Dr. So-and-So will be there and if you don't agree, suppose you don't charge me for the call if we find him." The operator hasn't agreed but on both occasions we have found this gentleman. He works for the Public Health Service roughly 7 days a week and at least 18 hours a day insofar as I can determine. There are others of this sort. These people provide incredibly good staff work for the Councils, they make these extramural programs possible. If something can be done to help them it would be in the national interest, I feel quite certain of that.

Now, I have taken as much of your time as I had any right to. I am grateful to you for the privilege of being here.

Senator HILL. You certainly used your time to mighty good advantage, I say, Doctor.

Where did you go to school, Doctor?

Dr. HANDLER. I went to Columbia and the College of the City of New York. The latter because there was a depression; although the training was very good.

Senator HILL. I see.

Dr. HANDLER. My parents decided they could no longer stand the drain of my being at Columbia and we had recently moved from a farm in New York to New York City and they took advantage of the fact that the city of New York provided an institution of higher learning for those who couldn't afford something else at the time.

Senator HILL. How long have you been down at Duke?

Dr. HANDLER. 21 years.

Senator HILL. 21 years.

Senator HILL. Dr. Thomas.

**STATEMENT OF DR. LEWIS THOMAS, PROFESSOR OF MEDICINE,
NEW YORK UNIVERSITY MEDICAL SCHOOL, DIRECTOR, THIRD
AND FOURTH MEDICAL DIVISIONS, BELLEVUE HOSPITAL, NEW
YORK, MEMBER, PATHOLOGY TRAINING COMMISSION, NIH**

PREPARED STATEMENT

Dr. THOMAS. Sir, I have a formal statement which I beg leave to submit.

Senator HILL. We will have that appear in the record in full.

(The statement referred to follows:)

STATEMENT OF LEWIS THOMAS., M.D.,¹ IN SUPPORT OF THE PROGRAMS OF THE
DIVISION OF GENERAL MEDICAL SCIENCES OF THE NATIONAL INSTITUTES OF
HEALTH

Mr. Chairman and honored members of the committee, I am grateful for this opportunity to speak in support of the programs of the Division of General Medical Sciences of the National Institutes of Health, and to urge that the budget for these programs, under the appropriation title "General Research and Services," be markedly increased for fiscal year 1960.

The Division of General Medical Sciences is chiefly concerned with the support of research of a fundamental biological nature, without special regard for the bearing of this research on any particular human disease. The Division has also launched a rapidly expanding program for the training of talented young people for careers in fundamental research, in the so-called basic medical sciences.

As head of a department of medicine and director of a major hospital service, I am keenly aware of the pivotal nature of fundamental research for the continuing progress of medicine. Those of us who deal with human illness at the bedside and study new methods for the diagnosis and treatment of disease are continually engaged in the application of information gained by others in basic research laboratories long before our time. We regard the source of this information as a sort of bank, but we realize that it is not self-replenishing or inexhaustible. If ever the day arrives when we become deprived of a continuing flow of new knowledge from the basic science laboratories, on that day the progress of clinical medicine will be brought to a standstill. There is some danger of this unless the support of fundamental research in biological and medical science can be maintained at a much accelerated level, matching that which has been achieved in recent years for clinical research. We may, in short, outdistance ourselves.

The position of medicine, as a science, cannot yet be compared to that of the physical sciences in our time, despite the spectacular advances in medical therapy that have been achieved in recent decades. There are still great gaps in our understanding of disease mechanisms, and much remains to be learned. Indeed, some of us in the field have the impression that we are just at the beginning of things, and that our science is in the position held by the physical sciences in the latter part of the 19th century. New, fundamental information of the kind that extends across interdisciplinary lines and gives us fleeting glimpses of what may be unified concepts of disease is just beginning to roll in, and the future looks bright. If things continue as the present signs indicate, our ability to apply new knowledge to disease problems will increase steadily. But it is important to bear in mind that this new knowledge will only come from fundamental research.

A few examples should suffice to illustrate the point. Research in the field of immunology, concerned with the exquisite specificity of the antibody response to particular antigens, has made it possible to investigate the reactions of animals to homotransplants of living tissues from other animals. Within the predictable future it seems likely that the immunochemical nature of the cellular antigen which now prevents the grafting of tissues from one animal to another will be understood, and with this we will be a step closer to the surgeon's dream of successful replacement of diseased or damaged organs by transplantation. As this work progresses, in laboratories across the country, we are also receiving a stream of information about other important matters, as a sort of side product, including the mechanisms involved in allergic reactions in living tissues, the extraordinary differences between the antibody reactions of animals of different ages, and the immunological reactions produced by cancer cells. It can be predicted with some assurance that continuing research in this general area, without respect to any particular disease entity, will yield benefits which now lie beyond the imagination.

The problem of aging is one that does not fit easily into any disease category, unless one wishes to regard aging as a disease in itself. But it is likely that this

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process contains secrets of profound significance for our understanding of the role of enzymes in maintaining not only the growth and reproduction of cells, but also their structural integrity. The problem can be approached in single cell cultures of bacteria, plants or animal origin, as well as in more highly organized populations of cells in tissues, organs, or whole organisms.

The field of genetics has long enjoyed the prestige of a pure basic science, but in recent years there have been advances which promise to add much to our understanding of human disease. This is especially true in pediatrics, where a whole new area of genetically determined defects in enzyme function has recently been uncovered. If pursued at the present rate, this line of research will lead to a better comprehension of our most important congenital abnormalities, and to new ways of dealing with these in human infants.

BASIC RESEARCH TRAINING PROGRAMS

I should like to stress the special importance, and the urgent need for increased support, of the activities of the Division which are concerned with the recruiting and training of talented young people for careers of research and teaching in the basic medical sciences. These people are badly needed at present, but for the future of medicine they are absolutely indispensable. With the growing complexity of medicine, the new biological frontiers now being broken through will influence and perhaps revolutionize the medicine of tomorrow. The constant, implacable demand by the American public for more and more scientifically trained physicians will place us, in the predictable future, not only in need of a new generation of scientists and teachers for our present medical schools, but we will have to find complete faculties for the new medical schools which obviously must be built and staffed. The time to begin thinking about this problem and to lay plans for the training of the successors of our present medical science faculties, is precisely today. If we do not do so, we run an almost certain risk of slipping back to the pre-Flexner era of second-rate medical schools, with large tasks and no tools.

A broadly based program of training for research in the fundamental medical and health sciences, such as the one now underway in the Division of General Medical Sciences, is a certain step in the right direction. The fields clearly recognizable as most in need of such development, at the moment, include genetics, developmental biology, physiology, pharmacology, bacteriology, epidemiology, and pathology. There are others, and I should add that the so-called clinical departments cannot be excluded from basic research training programs. A great deal of basic research can be done, and is being done in many of our medical schools, on human beings and their diseases in the disciplines of medicine, surgery, and pediatrics. As one example, among many, I would cite the recently acquired information about the factors involved in the coagulation of blood, certainly a basic research problem, which could only have been gained by the study of patients with congenital deficiencies of one or another factor. Also, parenthetically, it should be pointed out that the clinical departments in our major university hospital centers each year have access to the most talented group of each new medical school graduating class as interns and residents. If we continue to encourage the recruitment and early preparation of medical students for research careers, we must introduce new programs to continue their research training while they are still at the level of residents. To do this, basic research training programs similar to those now active in the general research training program of the Division should be made available for the clinical departments.

RESEARCH FELLOWSHIP PROGRAM

The research fellowship program of the Public Health Service is well known to members of this committee and has been established for many years, during which time these fellowships have supported many hundreds of able candidates. A few years ago, Congress wisely appropriated funds in order to start the senior research fellowship program which operates as an integral part of the total fellowship program now administered by the Division. These fellowships are eagerly sought and because of the intense national competition have come to be recognized as conferring unusual prestige upon the departments and individuals to whom they are awarded. Allowing for reasonable growth and for the support of increased numbers of these young faculty-caliber scientists, I would urge that additional funds be made available this year, and I am firmly of the opinion that a total of \$5,500,000 should be made available to this program, not only to

support increased numbers of candidates, but to encourage others coming along in future years to elect careers in academic medicine.

THE EXPERIMENTAL TRAINING GRANT PROGRAM

In concluding, I should like to put in a special word of commendation for the experimental training grant program now underway at a rather modest level in the Division of General Medical Sciences. This was designed to encourage several medical schools to provide new opportunities for medical students to become trained for research careers while still in medical school. I have had firsthand experience with such a program in the past 2 years, and I believe this to be one of the high roads to research training in the future. Medical schools across the country now attract a considerable number of extremely bright young men who have, in the back of their minds, the idea of doing research some day. Some of these have become interested in problems in biology or chemistry, or physics, during college, while others become attracted as they encounter the basic science courses in the first year or two of medical school. Incidentally, it should be noted that the new basic research training programs recently begun in many preclinical departments will certainly have, as an immediate side product, the attraction of many medical students to careers in research.

The research-oriented medical students comprise the largest pool of potential talent for the medical sciences that exists at the present time. From this pool, much can be obtained for the faculties of the future. But many, perhaps a majority of the most talented, are being lost each year. The 4 arduous years of crowded courses, plus the prospect of 3 or 4 subsequent years of hospital residency, provide little opportunity or incentive for research, and by the time hospital training is completed it is usually too late.

Recognizing the need for something new and better the National Institutes of Health recently started the experimental training grant program. For some medical schools this made it possible to change the curriculum for selected students, or to introduce new flexibility into the curriculum; summer fellowships for student research have been awarded; students have been encouraged to drop out of school for an entire term for full-time research; and combined M.D. and Ph.D. programs have been inaugurated. The results of these preliminary experiments already seem, in some schools, successful beyond prediction. There is substantial evidence for the existence of widespread and growing interest in research on the part of students, and for enthusiasm for the program in the faculty, and it has also demonstrated that certain students possess an astonishing capacity to get things done if only given the opportunity. For example, one student of my acquaintance went to work in my pathology research laboratory in the summer between his second and third years, continued working evenings and weekends through the next 2 years, and completed a problem in tissue transplantation of such excellence that he was invited to present his work at a recent international symposium in Belgium while still a fourth year student. At the time of graduation this man, and some 12 classmates of equal quality, seem certain bets for careers in medical science. This was the result of a student training program which provided a modest increase in free time from formal course work, and a marked increase in opportunities for students to come into the research laboratories to work. Although this may sound like something easy to set up, its real cost to the medical school should not be underestimated. It required the addition of several new full-time faculty members in several preclinical science departments, in order to free up enough men from teaching responsibilities to cope with the influx of students into departmental laboratories. It also required major additions to the research installations to provide space for the students and the necessary research supplies and equipment. And it took time, effort, and enthusiasm on the part of the whole faculty, for to introduce training for medical research as a major undergraduate program objective of the medical school is a new and complicated task.

At the same time, it should be added that this kind of training, whether it involves medical students or postdoctoral fellows, is the most rewarding work imaginable for a medical faculty. To be able to turn out each year a significant number of creative, intelligent students on the road to future careers in research is to have, each year, the richest of harvests. Most teachers dream of this sort of thing, but it has always seemed a matter of pure luck, or accident, to have it come about. Now it begins to look as though this is something that can be

deliberately influenced by the training programs of the National Institutes of Health. This is something quite new and tremendously effective. If, through such programs, our medical schools can be helped to turn out increasing numbers of potential research men and teachers of medical science, it will be a great stroke indeed. It will cost a lot of money, but it will be wonderfully worth every penny.

Finally, I would like to assure the committee that my fellow faculty members and my colleagues on the study section and training committees, share my enthusiasm for the programs of the Division of General Medical Sciences. As to the amount of money needed for the next fiscal year, I am in agreement with the estimates suggested by Dr. Handler, in his preceding testimony. If this can be appropriated, it will meet an urgent need, and will be well used.

Thank you, Mr. Chairman, and members, for your kind attention.

GENERAL STATEMENT

Dr. THOMAS. Dr. Handler has reviewed with great skill the various programs.

Senator HILL. He didn't leave you much ground to cover, did he?

Dr. HANDLER. I apologize.

Dr. THOMAS. I might say at the outset that I agree wholeheartedly with everything he said as I always do.

BASIC RESEARCH AND TRAINING IN GENERAL MEDICAL SCIENCES

I should like to confine my own testimony to one particular combined activity now supported by the division of general medical science itself and this is the research and training programs in the basic medical sciences.

In my own capacity as director of the large general medical service which comprises about 400 beds in Bellevue Hospital, also member of the Board of Health, New York City, I am in a sense at the other end of the line from Professor Handler, in the problem of controlling human disease; and indeed I think one might suppose that Dr. Handler here and I are on opposite sides of some sort of fence. This is not at all the case. Both of us are concerned with the same thing, which is the preservation and improvement of the public health but I think we speak from different vantage points. Dr. Handler is, as you know, professor of biochemistry and heads a large and very distinguished department. What he is engaged in is basic research par excellence.

It is my job as professor of medicine to see to it, if I can, that all of the advances of the fundamental medical and biological sciences are brought to bear wherever they can be brought to bear in clinical medicine.

KNOWLEDGE FROM BEDSIDE CARE OF PATIENTS

My colleagues and I are concerned with the bedside care of patients, and we try to apply basic medical science when we can to problems in human disease.

For those of us who do this kind of work for the last two decades or so it has been very fruitful and exciting. We have had a rich load of fundamental information constantly at our disposal, and I think our understanding of some of the demands and most important diseases has been greatly enhanced during this time. Many of us feel that it is in the foreseeable future, of course, that we will be able to bring some of these under control. But all of us recognize that there

is a great deal still to be learned, if we are going to be able to cope with arteriosclerosis, or with the disabilities of old age or with cancer or coronary thrombosis, or the very badly understood diseases of the central nervous system or the genetically determined diseases which kill newborn infants outright. If we are going to get anywhere with diseases of this stature we are still simply going to have to have more basic information about fundamental mechanisms and tissue reactions, lying somewhere in the field of pathology, immunology, physiology, and biochemistry. We have to have more information than we have now.

DISEASES OF HYPERSENSITIVITY

I think that none of us can predict where that information is going to come from, or from whom; and, most important, none of us can predict when it will come in response to what kind of specific questions. In my own case, the diseases in which I am most interested and about which I am best informed are the human illnesses generally attributed to hypersensitivity or immune mechanisms. I happen to believe that a considerable number of our major diseases somehow involve the production of different kinds of antibodies, antibodies directed not against invading microbes or viruses, as antibodies are supposed to be, but against constituents of one's own living cells and tissues. Among the diseases that I think perhaps can be explained on such a basis are rheumatic fever, rheumatoid arthritis, conceivably multiple sclerosis, various hemorrhagic diseases, and fatal anemia.

I think it should be emphasized that these are just possible illustrations because the case has not yet been proven for any of them. I doubt very much that it will be proven by those of us who are clinicians. I think we can take this sort of problem only a limited distance and we then become entirely dependent upon new information that must be supplied to us by our colleges and the basic science departments of the medical schools.

DEPENDENCE ON FUNDAMENTAL MEDICAL SCIENCES

I would predict that as this sort of information does come to us we will figure out, or we will try to figure out, how to apply it to the diseases at hand, and we may be able then to decide what new measures can be applied at the bedside. It is in this way that the clinical sciences in medicine are related to, and dependent upon, the fundamental medical sciences. And this dependency has become greater and much more of a problem as the medical sciences themselves have advanced and become more complex. As medicine becomes more complex the problem of finding talented, imaginative, creative young people to enter the field of basic research in medicine becomes steadily more urgent and much more demanding. The fact of the matter is, sir, that there is already a disturbing shortage of qualified new young people in the basic medical and biological sciences and if this shortage increases the problem will not simply be disturbing, it will be appalling. Moreover at the level of clinical medicine we are beginning to feel a growing need for highly trained people who not only know how to do basic research but also know something about clinical medicine itself.

Now it has been suggested in some quarters that we are already pretty well supplied with medical scientists; that if we try to include more into this field we may interfere with the existing supply of practicing physicians. I should like to state for the record quite categorically my own opinion about this which is based on a fairly long and close experience in the field of medical research. My opinion is that we are not well supplied with qualified, adequately trained young scientists in medicine.

SHORT SUPPLY OF MEDICAL SCIENTISTS

On the contrary, they are in extremely short supply and we need many more of them. Furthermore, I do not see any reason to suppose that any foreseeable increase in the number of trained investigators is going to interfere in any way with the supply of physicians for our communities. I think there may be other reasons for a shortage of doctors in this country, but this is certainly not one of them. On the contrary, as Dr. Handler pointed out, the medical scientists who are trained today are going to become members of the faculties of the medical schools for tomorrow, and we are going to need these people very badly. What I am talking about is the need for a relatively small number, a small percentage of the graduates of our medical schools who are really qualified to be trained for careers in medical research and teaching. In some medical schools this may be only 3 or 4 men in a graduating class, and for others it will number maybe higher—perhaps 5, perhaps 15 out of a class of 100 or 120 men.

This will not create a shortage of available physicians. On the other hand, if we cannot recruit such men into the field of medical research and get them properly trained for research careers, it will mean in the years ahead a very real shortage for the science of medicine and for the faculties of our medical schools. I think we might as well face the fact that the main reason we need more physicians today is we are carrying an increasing burden of diseases which require painstaking, laborious care and which we have not learned how to prevent or to cure. Take, for example, diabetes or senility or hypertension or schizophrenia, as off-the-cuff examples of what I mean.

BASIC RESEARCH TRAINING PROGRAMS

This brings me finally to the basic research training programs of the Divisions of General Medical Sciences, which is what I come to plead for this afternoon. These programs, as Dr. Handler said, have already begun. They provide our basic science departments, biology, pharmacology, genetics, biochemistry, and the like, with such financial support so that they can undertake larger and better programs of training increasing numbers of young people with agile minds, show them what basic research is all about, and teach them how to do it.

Already, although the program has been in existence for only a year or so, the results have been literally astonishing. I think we can safely say that of all the things that have been done so far for the National Institutes of Health, there is no other program that has attracted so much interest and so much enthusiasm among the leaders of the basic medical and biological sciences in this country. I think it is safe to say also that already, although the programs have only

begun, we have a considerable number of young men stemming from this program already at work at research ventures of top-grade departments in medical schools all across the country. In a few years this first year's crop will be developing the new information that is badly needed.

The training program for research careers I think should continue to expand for a while, probably for the next several years, and it is bound, as Dr. Handler pointed out, to become very much more extensive. Eventually as the supply of medical researchers begins to approach what is really needed, I think it will begin to level off.

If the program of training men for careers in research is cut back now or if it is held at the existing level, so that it cannot grow as it should, I think the whole effort may falter and perhaps fail. I would suggest that whatever budgetary considerations may enter the picture and however much it may seem that this sum exceeds the amount of money appropriated last year, it ought to be given increasing support. I think that the future of medicine actually depends more on this program than on any other venture thus far undertaken in the National Institutes of Health.

Senator HILL. Training the personnel, Doctor?

Dr. THOMAS. Yes, sir; in the basic research training program.

I think that any program which promises to give us, as this one does, a greater number of productive research men and potential teachers of new research men and physicians for the future ought to be regarded as a sound and sensible investment for the country's future.

INCREASED FUNDS NEEDED

Personally, I believe it is an investment that we can well afford. I rather doubt that we can afford, in our kind of world, not to make this kind of an investment. I think the basic science research training program, while it expands rapidly for a few years, should have allotted to it for the coming year an increase from the present figure of \$6 million to something approaching \$15 million. I would agree that the reason for the rapid growth of the program, which is evidenced by the rapid increase in the amount of money needed for it, is due to the fact that there has existed up to this time a vacuum.

Now, all of the basic science departments with established research programs and research men, all of whom are ready to give this kind of training, and who have been waiting for years for the change to do just this sort of thing, are ready to go. There are some departments which have already received grants, and these grants are in operation, but a good many others are waiting to tool up for the same kind of expanding research training.

I think if it can be adequately supported by the Congress, this single program can bring about in this country such a renaissance of the medical sciences as has not been seen or imagined in our century.

Thank you, Mr. Chairman, for your kind attention.

Senator HILL. Are there any questions?

We certainly want to thank you, Dr. Handler and Dr. Thomas. You certainly have maintained the high order with your very fine testimony we have had here today. You have both brought us some very informative, interesting, and splendid testimony. As I say, you have kept right up to the highest order.

RECRUITMENT OF UNDERGRADUATES

Dr. HANDLER. May I speak to one point?

Senator HILL. Certainly, Doctor.

Dr. HANDLER. I made reference to two programs which deal with recruitment from undergraduate students. These pose a problem to the staff of the National Institutes of Health. I am not quite wise enough in these matters to know what the techniques are. But if your committee does find us a useful approach to this serious problem, then I think it will be necessary to provide the staff of the NIH with a specific directive permitting them to do this, possibly for their own protection, as I understand it. I think this amounts to a request for the earmarking of funds for these specific purposes. But I think in this case, were you to agree to this procedure, it would be well to make it quite clear that this is the intent of the Congress.

Senator HILL. In other words, you would make the intent clear, and leave no question for anyone to doubt as to what we had on our minds in appropriating the funds?

Dr. HANDLER. That is quite right. Thank you.

Senator HILL. Again, we certainly want to thank you, Dr. Handler, and thank you, too, Dr. Thomas. We are deeply grateful to both of you.

Thank you very, very much.

Tomorrow morning the committee will meet at 10 o'clock. We will consider the matter of the appropriation of the National Cancer Institute first.

Our witnesses will be Dr. Sidney Farber of the Children's Hospital, and professor of pathology at Harvard University Medical School at Cambridge, Dr. Isidor Ravdin, who is vice president and also professor of surgery, the University of Pennsylvania.

Immediately following their testimony we will have testimony from the American Psychiatric Association, Dr. Francis Braceland; the National Association for Mental Health, Mr. Paul Johnston.

COMMITTEE RECESS

The committee will now stand in recess until 10 in the morning.

(Whereupon, at 4:03 p.m., Tuesday, May 26, 1959, the hearing was recessed to reconvene at 10 a.m., Wednesday, May 27, 1959.)

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR 1960

WEDNESDAY, MAY 27, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10:15 a.m. pursuant to recess, in room 1318, New Senate Office Building, Hon. Lister Hill, chairman of the subcommittee, presiding.

Present: Senators Hill, Monroney, and Smith.

Also present: Senator Neuberger.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

NATIONAL CANCER INSTITUTE

TRIBUTE TO SECRETARY DULLES

Senator HILL. The committee will kindly come to order.

As we begin today's hearings on appropriations for the National Cancer Institute for the coming fiscal year, I think it is appropriate that we take notice of the passing of our former Secretary of State, John Foster Dulles. In the 71 years of a full and vigorous life, many of which were in the service of our country, John Foster Dulles rose indomitable from many a crisis, only to finally fall victim to the most dread killer of our time, cancer.

Cancer, that most ancient and accursed scourge of mankind, has over the past few years robbed the U.S. Senate of some of its greatest leaders: Robert A. Taft, Arthur Vandenberg, Kenneth Wherry, Brien McMahon, and Matthew Neely.

What more fitting, more meaningful, or more reverent memorial to the contributions which John Foster Dulles made to our country could there be than a high resolve on the part of those of us assembled here and elsewhere throughout this great land to redouble our research efforts against the monstrous killer which struck Mr. Dulles down and which will claim the lives of 250,000 more Americans before this year has ended?

It is indeed fitting that we dedicate these hearings this morning to both the memory of John Foster Dulles and to the hope that our deliberations here may serve to bring closer the day when medical research will wipe this infamous disease from the face of the earth.

We are very happy to have with us our colleague, Senator Neuberger. As chairman of this committee I requested the Senator to come and be with us, and we would be very happy at this time to have him make any statement that he might see fit.

Senator Neuberger.

CANCER RESEARCH PROGRAM

STATEMENT OF HON. RICHARD L. NEUBERGER, A U.S. SENATOR FROM THE STATE OF OREGON

SEVERITY OF CANCER PROBLEM

Senator NEUBERGER. Mr. Chairman, thank you so much for your courtesy, and of course that appreciation goes to Senator Smith as well.

I can only agree with you that our Secretary of State John Foster Dulles could have no more fitting memorial than a vastly expanded cancer research program by our Government and by the private groups working in this vital field.

It is a great honor today for me to appear very briefly with two of the most distinguished medical men in our country in the field of cancer research, Dr. Sidney Farber and Dr. Isidor Ravdin. I am only going to presume upon their time for a few minutes. I must attend another committee meeting and, of course, I can contribute nothing technically or in the way of medical knowledge, of which they are such a source of wisdom.

But I do agree with you, Mr. Chairman, that there could be no greater way to honor the memory of John Foster Dulles than to launch a vast program through the National Cancer Institute aimed at some day vanquishing the disease which claimed the life of the Secretary of State.

I want to join Dr. Farber and Dr. Ravdin in urging that funds for the National Cancer Institute be increased from the administration's request of \$75 million to \$109 million during the coming fiscal year. This is the sum needed to fire a few missiles or rockets off the launching pads of Cape Canaveral. It may be the sum that will provide the cure to the disease that will strike 50 million Americans now living. Can we dare to pinch pennies in the face of a challenge such as this?

You know, Mr. Chairman, if we thought there was a foreign foe that would strike down 50 million Americans, and that about 34 million of these would die as a result of this attack, every single resource that our country has would be thrown into this fray. Our Treasury would be emptied, taxes would be levied on our citizens to the ultimate degree, every young man and woman would be mobilized in the national effort, perhaps even older ones. Yet here is a foe, cancer, which we know will strike down 50 million, approximately two-thirds of whom will succumb to the enemy, and yet we spend in research—our weapon against this foe—less than we spend on chewing gum, less than we spend on permanent waves, far less than we spend on greeting cards, and only on infinitesimal fraction of what we spend on liquor and tobacco. This has been said many times. I will not restate it further.

Naturally, I have a special interest in cancer research. Last fall, as you know, I myself underwent treatment for cancer. I have some understanding of this experience and ordeal.

I was lucky, far more lucky than most people, who are afflicted with the disease. It was detected earlier and, perhaps more important, the malignancy which affected me turned out to be what is known as a responsive tumor which could be destroyed by radium. Of course, all tumors do not, unfortunately, fall into that category.

But I think my experience has given me some understanding of why our country does not put out a greater effort in the field of cancer research. I think each one of us, all 170 million of us, have a curious fatalism about cancer. We think cancer is something that will happen to the other fellow. That is the only way I possibly can account for the fact that we spend so relatively little on cancer research as compared with many of the frivolous avenues through which our national resources are so often channeled.

I remember that I myself thought this. When my doctor, who is my closest personal friend, told me bluntly that I had cancer, I lay there on the table in his examining room and, amidst my panic and terror, I said to myself: "This can't be. This is a dream. Cancer is always something that happens to somebody else. It isn't something that happens to me."

And I wonder if each of the Americans, indeed people all over the world, who sometime in their lives are afflicted with cancer, do not think that same thought. "This can't be me. This must be somebody else, and it is all a terrible dream."

BILL FOR LONG-RANGE CANCER RESEARCH

As you know, I myself have introduced a bill for a long-range continuing appropriation of \$500 million to the National Cancer Institute. When I was living in Georgetown 4 years ago, my neighbor was Dr. Leonard Scheele, then the U.S. Surgeon General. He told me that the National Cancer Institute could advantageously use this amount to insure research stability and continuity and guarantee that trained researchers could be employed with knowledge that they had employment from year to year and money to finance completion of their projects.

In conclusion, Mr. Chairman, I want to say this to you: I know of no two Americans who are laymen who have contributed more to expanding the horizons of medical research, and thus of life itself, than you, Senator Hill, and the Senator from Maine, Margaret Chase Smith. In the time that I have followed public affairs in the United States, both as a writer and as a Senator, your two names have come to mean to me humanitarian effort in public life to see to it that adequate Federal funds are spent to advance life itself.

I would say that if we ever establish the kind of a memorial that John Foster Dulles should have, which is a vastly expanded cancer research program, that Senator Hill and Senator Smith of Maine will certainly be the architects of that edifice.

Before I leave, I want to say that you are very kind to permit me to lead off these hearings and precede Dr. Ravdin and Dr. Farber. I wish to thank them for all the contributions that they, and their

associates in medical research back through the years, have made to the findings which have helped to prolong my own life.

Thank you.

Senator HILL. Senator, we certainly want to thank you.

Any questions, Senator Smith?

Senator SMITH. I would like to express appreciation for the Senator's very fine comments.

Senator HILL. We do. We appreciate very much your kind words and most particularly not only your presence here this morning but the many, many fine contributions that you have made to the cause of medical research and to the battle against these dread diseases.

We are deeply grateful to you, Senator.

Senator NEUBERGER. Thank you, Senator.

Senator HILL. Deeply grateful. Just 1 minute before you leave. I know you have the other committee meeting.

LETTER FROM ARTHUR GODFREY

You have spoken of your own experience. I have here a letter which I received this morning that I think might be appropriate to read in the record at this point. It is a letter from Mr. Arthur Godfrey. It comes from New York under date of May 25.

MY DEAR SENATOR HILL: I hope I am not too presumptuous in asking that my efforts be added to those of the medical experts and others who will be appearing before your distinguished Committee on Health Appropriations. I most urgently request that greatly increased appropriations be voted by the Federal Government for the fight against cancer which is the second leading cause of death in this country.

Personally I am now dedicated to the dissemination of information so that the general public will understand that semiannual examination is the only guarantee of early discovery and diagnosis now available. However, all the intricate and miraculous surgery that man can devise is utterly useless when discovery and diagnosis are made too late. Surely a crash program of cancer research is as important today to America as similar projects now being pursued by nuclear fission missiles and space scientists. Cancer is a horribly insidious menace to humanity which can sneak up on the healthiest of individuals without the slightest indication or warning. Only through research—intensive well-financed all-out research—can we hope to find a cure, if not a preventive, for cancer.

I am informed that the National Cancer Institute of the U.S. Public Health Service is currently spending only \$58 million for cancer research. I am further informed that those who will testify before you gentlemen and Senator Margaret Chase Smith will recommend approximately double that amount for research, training, and other projects in order to effect a successful cancer research program. I am sure that the members of your distinguished committee, properly briefed, will have no trouble reaching a decision to vote the necessary funds which will result in a successful breakthrough against cancer.

I hope the Senator will realize, of course, that I ask this in the interests of millions of our fellow Americans, not for myself. The prayers of my friends were answered in the fortunate fact that the cancerous tumor in my lung was discovered and removed in time, and as a result there is every reason to believe that my escape is now 100 percent complete. The brush was close enough, however, to bring home to me very forcefully the need for a crash program on cancer research. The lives of far too many irreplaceable people have been cut short by this horrible disease. We must help our scientists to find the solution.

Most respectfully,

ARTHUR GODFREY.

Thank you, Senator Neuberger.

Senator NEUBERGER. Thank you, Senator Hill. It was very interesting to hear the very moving letter from Arthur Godfrey.

Senator HILL. Do you have any preference who should go first?

Dr. FARBER. Dr. Ravdin, if you please, sir.

BACKGROUND OF WITNESS

Senator HILL. All right, Dr. Ravdin.

Doctor, you are a very modest man but I am going to take a minute to read into the record that you are professor of surgery of the Pennsylvania Medical School, which we know was America's first medical school, chairman of the board of regents of the American College of Surgeons, chairman of the clinical panel, Cancer Chemotherapy, National Service Center, president of the American Surgical Association, director-at-large and member of the Legislative Committee, American Cancer Society.

And we would be happy to have you supply for the record any additional biographical information.

We will now be happy to hear from you, Doctor, and we appreciate your presence here.

FUNDS FOR NATIONAL INSTITUTES OF HEALTH

DR. ISIDOR S. RAVDIN, PROFESSOR OF SURGERY, UNIVERSITY OF PENNSYLVANIA MEDICAL SCHOOL; CHAIRMAN, BOARD OF REGENTS OF THE AMERICAN COLLEGE OF SURGEONS, PHILADELPHIA; CHAIRMAN, CLINICAL PANEL, CANCER CHEMOTHERAPY NATIONAL SERVICE CENTER; PRESIDENT AMERICAN SURGICAL ASSOCIATION; DIRECTOR-AT-LARGE AND MEMBER OF LEGISLATIVE COMMITTEE, AMERICAN CANCER SOCIETY

GENERAL STATEMENT

Dr. RAVDIN. Thank you very much, Senator Hill.

I have been deeply moved by your opening statement this morning, every word of which was so true. Cancer is a dreadful disease and it has taken the life and lives of a number of distinguished men in the Senate and now of our great Secretary of State.

I had the opportunity of seeing Mr. Dulles the morning after his first operation and of seeing him several times during this very trying period after his return from Europe. I have never seen a man face the future with more fortitude than did John Foster Dulles. And it would be fitting, indeed to have a memorial to him and to the other distinguished men who have served in the Senate and who have lost their lives from the similar disease.

I want to thank you, too, for the opportunity of appearing here this morning before you and your committee to speak on that portion of the 1960 budget for the National Institutes of Health which relates to the provision for extending our knowledge in the area of malignancies.

I come before you as a member of the board of directors and of the legislative committee of the American Cancer Society. The legislative committee of that organization reported to the board of directors at its meeting on January 15 the views that I shall state concerning the contemplated budget for cancer and these are also the views of the board as of that date.

BAYNE-JONES REPORT

The board considered at considerable length the needs of cancer research in this country and the necessary expansion to support these activities through the National Cancer Institute for fiscal 1960.

The committee, as well as the board of directors, had before them the report of the Bayne-Jones group of consultants, which had been submitted to the Secretary of Health, Education, and Welfare. This report, as you and your committee well know, advocates a rapid and continuing expansion in medical research, and points up those areas at which we, as a nation, should arrive by fiscal 1970. The report is broad and general in its recommendations. It does not provide specific levels of research support which should be reached by the different Institutes of Health, and I would believe that this was a wise decision to be made. It does, however, leave no doubt about the necessary provision for rapid and continuing expansion in medical research and in medical education.

I have said before, and I say again, for the American Cancer Society, that we accept the general philosophy which has been stated by Dr. Bayne-Jones and his associates. It is our feeling that after careful study of this entire problem, the objectives which the Bayne-Jones committee placed before itself may well be reached before 1970. There are others who believe, as we do, that we are moving along so rapidly that it is not now possible to state exactly when the goal will be reached, but that there is every possibility that it may be reached by 1965.

NEED FOR STEADY INCREASE IN FUNDS FOR CANCER RESEARCH

We believe that based upon the information available at the time the legislative committee of the American Cancer Society met, that plans should be made for a continued and steady increase over the next several years in the annual level of appropriations to the National Cancer Institute. It was because of this that at the meeting of the board in mid-January, an increase of \$10 million for 1960 over fiscal 1959 was carefully considered, and I was instructed when I appeared before this committee to state that this was the minimum essential for the necessary growth of this very great and important activity. It was our hope that this would permit the Institute to continue its current program, to provide funds for an expansion of reached, and we hope sincerely that it would permit of an increase in allowances for the indirect costs of research from 15 to 25 percent.

INDIRECT COSTS OF RESEARCH

I should like to discuss with you first the matter of the indirect costs of research, for I believe that this is of tremendous importance to those institutions which are dedicating themselves to an expansion of the research effort concerning the health needs of this Nation. I am inclined to believe from the statements that have been made that there is a general recognition and acceptance of the fact that we must face this matter more clearly than we have in the past. Our great schools of medicine are, in most instances, a part of our great universities. These schools of medicine have been, and will continue to be, important in this Nation's great effort to extend knowledge through

medical research and through research training. Data are available which strongly suggest that approximately 70 percent of all research related to medicine, going on in our colleges and universities, is being done in our schools of medicine.

This is as it should be, but it is important for the Congress to realize that while this tremendous extension is taking place, we cannot ask our parent institutions to be drained of the limited resources which they now have from endowments in order to meet the actual costs of such partially subsidized research. Improvements in teaching and in training are also important, for we must, within our institutions, continue to turn out the best possible type of physician, and we must make adequate provisions for the training of a wide variety of specialists, not only for the clinical subjects which are a part of medicine, but for the training of men in basic science who will be competent to extend the existing knowledge through research.

Our medical schools and the universities in particular, are finding themselves in the difficult position that in order to support the greatly extended areas of research effort, they are not able to extend their educational programs as they should. Just as many of the voluntary foundations, and volunteer health agencies, are providing additional allowances to meet the actual costs of research, so too must the Federal Government now consider that this is essential to the continued functioning of our medical research efforts.

CONSTRUCTION OF FACILITIES

Mr. Chairman, you and your committee and Congressman Fogarty and his committee deserve the everlasting gratitude of the people of this Nation for what you have done to extend medical research in order that the health needs of our people be better met. Medical research construction valued at approximately a quarter of a billion dollars has been completed or is now nearing completion under the Federal aid program of providing matching funds for research facilities. In no other area in the world has an effort such as this ever been contemplated or ever been achieved.

It is the opinion of the board of directors of the American Cancer Society that the act which made such facilities possible, having been extended, that the level of \$20 million provided in the President's current budget should be increased by \$10 million to the original level of \$30 million annually, and that this amount be made available for each year of the next 5 years on a matching basis.

Senator HILL. Doctor, would it interrupt you too much for me to make a comment there? Speaking about the appropriation for the facilities for medical research, as you know, we provide in the act that the Federal dollar should be matched dollar for dollar. But that act has not only matched but for every one Federal dollar that has gone into one of these facilities we find at least four or five non-Federal dollars; isn't that true?

Dr. RAVDIN. That is right, sir.

Senator HILL. Which proves to be a tremendous stimulation.

Dr. RAVDIN. That has been our experience.

Senator HILL. Not only Federal dollars have been brought in there but brought out not one for one but four or five dollars for every one Federal dollar going in.

Dr. RAYDIN. You are correct. Absolutely correct.

The Congress must realize that while we are building new research facilities, we are really in urgent need of funds to rehabilitate our existing old facilities for teaching and training.

QUESTION OF WISDOM OF INCREASES

In advocating the increase from the current level of approximately \$75 million to a minimum of \$85 million, I should like to pose the question as to whether such additional funds can be spent wisely. I was asked this question by someone high in the Government a year or two ago. It is the feeling of the American Cancer Society and its board of directors, and I heartily endorse it, that this can be accomplished. If as the result of the expenditure of these funds and the funds which will be made available through the American Cancer Society, a rapid exploitation of existing research becomes necessary as the result of a breakthrough, additional supplemental appropriations will immediately be necessary. I am sure that when this time comes, the Congress will act rapidly, to exploit in every possible way such a breakthrough, not only for the needs of our people, but for the needs of people throughout the world, as you in your wisdom realize.

CANCER CHEMOTHERAPY

As chairman of the clinical panel of the Cancer Chemotherapy National Service Center, I should like to tell you and your committee that real progress is being made in this area. Substantial progress has been made during the last year, and certain areas of research are now being more clearly defined. I have said previously, and I will say again, that while surgery and X-ray are valuable in the treatment of malignant disease of a variety of types, they are not good enough to still the search for further and better methods of therapy.

New agents are being made available for clinical testing at an amazing rate. The Cancer Chemotherapy National Service Center is seeking new and better methods of screening these agents before they are made available to my cooperative groups for extended clinical trial. We need better methods of screening these agents. I would hope that before too long, human tumors, transplanted to experimental animals, may provide a more satisfactory approach for the selection of agents to be used in the treatment of human cancer. Studies are actively going on now in the School of Veterinary Medicine in the University of Pennsylvania, the only veterinarian school directly connected with the university and not a land grant college.

The cooperative program of the Cancer Chemotherapy National Service Center, which Dr. Farber will discuss at much greater length, is, we agree, moving forward at an amazing rate. In this program, dedicated clinical and basic research workers are pooling their information following the use of a wide variety of carefully tested agents to determine whether these agents can further extend the efforts toward cure. The program, which is a program in addition to surgery and given afterward is going forward at a splendid rate. I myself have seen certain of these agents cause the rapid disappearance of malignant tumors which have metastasized to the lung so that the lungs seem full of cancer and to other malignant lesions which have

moved and metastasized in other portions of the body. I have seen these disappear with certain of the agents we now have available. The tragedy of it all is that after a period of time which frequently is all too short, these malignant lesions again make their appearance. We shall have to find agents which destroy every cancer cell in the body, and such agents, I believe and hope will be found.

CANCER RESEARCH SEMINAR

A few months ago, I attended a seminar in Excelsior Springs, Mo., on cancer research which had been organized by the American Cancer Society. Dr Farber was there also. There, about 40 of the leading cancer research people in this country met with science writers from all over this country to discuss in detail developments in their particular field of research. Had you attended this conference, you would feel as I do that real progress has and is continuing to be made. The life expectancy of patients with a variety of malignant lesions is being extended.

I said at that meeting and I want to say again today that we are not satisfied with what has been accomplished and we will not be satisfied until we have the tools to cure patients with widespread malignant disease. The progress is, however, heartwarming.

Senator HILL. Doctor, might I ask you a question there?

How much of this progress you have spoken of is attributed to medical research?

Dr. RAVDIN. How much of it, sir? About 99.44 percent, sir.

Senator HILL. I knew that would be the answer but I wanted it for the record because this committee is also confronted with the proposition, you can imagine, "Well, we have been appropriating money for this and what do you have to show for it"? That is a natural question.

Isn't that right, Senators? I wanted that for the record, Doctor.

RESULTS OF INCREASED RESEARCH

Dr. RAVDIN. Senator Hill, a few years ago an infant with leukemia never lived out the first year. Children are now doing this. Dr. Farber has a number of such children under his care and further progress will be made. This progress is heartwarming. We are not discouraged. Great truths in medical knowledge are usually the result of research by many workers, each of whom adds to the sum total of the final accomplishment. Every month additional distinguished research workers are entering this very important field.

Just prior to the meeting at Excelsior Springs, I attended the meeting in Washington on March 31 of the Cured Cancer Congress. It was, for me, a memorable occasion. No one could have participated in that program which was held under the auspices of the American Cancer Society without a real sense of humility and gratitude—humility that research is overcoming ignorance.

I should like to tell a story without introducing names, sir, which bears upon this very point. In the early 1920's a distinguished clinical pathologist of one of the Philadelphia hospitals came to the William Pepper Laboratories and had luncheon with the late Alfred Stengel and certain of his associates. Dr. Stengel asked this man, he said, "Tom, how is young Tom?"

This individual said, "I wish young Tom was dead. He has diabetes. He is 13 years old. He isn't any bigger than a boy 6 years old. He can't possibly live and grow up." Dr. Stengel looked at him and said, "Tom, you ought not talk this way. The next month, the next year, or the year after someone will come forth with a solution to get rid of diabetes." The very next day Banning and Best announced the discovery of insulin in Toronto. This boy, to my knowledge, was the second patient treated in this country. He began rapidly to grow. He went to Germantown Friends' School. He went to Haverford College. He went to the University of Pennsylvania School of Medicine. He is himself a clinical pathologist, married, as well as anybody could be and has five children.

The late Dr. James Ewing of New York, whom I had the great pleasure of knowing, once said, and I should like to quote:

The medical problems of cancer are now more plainly before us, the conscience and progressive spirit of the medical profession are now fully awake, and the way is now open to an era of greater clinical efficiency in the diagnosis and treatment of cancer. As the education of the public enlarges, as the schooling of medical students improves, as the vast forces now engaged in every department of research enlarge our knowledge, as opportunities for graduate training increase, and as every arm of the service becomes coordinated and efficient, who can doubt that we shall shortly see a vast reduction in the mortality from cancer.

That is already coming to pass.

I cannot, Senator, accurately predict the future. I might be so bold, however, as to assert that it is my firm belief that the progress which Dr. Ewing so essentially prophesied is coming and very likely we shall see it fruition in the lifetime of the oldest of us here today.

Thank you very much.

LIMITATION ON INDIRECT COSTS

Senator HILL. Doctor, you spoke about the limitation of 15 percent on indirect cost to our medical schools in their medical research. We know that where the National Institutes of Health make a contract with a research institute other than a medical school there they can and do allow the full indirect costs. Is there any reason on earth why you should draw this line of distinction between a medical school and some nonmedical school research institute or laboratory?

Dr. RAVDIN. Senator, it does not make sense to me that when you receive funds under the grant mechanism you have a 15 percent grant, for the indirect costs of research. When this is done by contract it is adjudicated by agencies of the Government as to what this really costs. This is as it should be.

Senator HILL. Of course as we have increased our research we have added more and more burden upon our medical schools, isn't that true?

Dr. RAVDIN. Not only upon the medical schools but upon our universities, sir.

Senator HILL. Our universities.

Dr. RAVDIN. In the research that we are conducting for the armed services, sir, we obtain the full indirect costs of such research. This important area within the Government in the area of the Public Health Service and the National Institutes of Health should be permitted to do likewise in sponsored research.

Senator HILL. Any questions, Senator Smith?

Senator SMITH. No.

Senator HILL. Senator Monroney?

EXCHANGE OF INFORMATION

Senator MONRONEY. Could you tell me, Doctor—and I am sure that the other two committee members have had more experience than I, and know the answer—do we have a nationwide network of exchange of all intelligence and all information of promising methods for medication or surgery for cancer?

Dr. RAVDIN. Yes, sir, we do. The Cancer Chemotherapy National Service Center and the clinical panel which is the component part of it—the clinical panel is made up of commission and research workers in nearly every one of our great institutes and medical schools and their hospitals in this country. These individuals cooperate first on a regional basis and then at the national level and next fall there will be a 2-day meeting here in Washington in which representatives from all of these areas will meet together and they will pool their entire information. Furthermore, they receive the information of what is happening with the use of new agents of a specific type throughout the entire panel. And this information is further made available by the publication of the National Cancer Institute Cancer Chemotherapy. There is nothing hidden in this in any way. And in the cooperative program it is heartwarming to realize that all of the individuals participating in this work participate on a cooperative program. No one individual gets any more credit than any other individual.

Senator MONRONEY. I think that is a wonderful thing. The purpose of my question is to ask if we are doing enough. Are we putting enough money or any money into seeing that the rest of the world can have all of the things that we have found out? Are we actually encouraging rather than passively accepting the interchange? Are we encouraging it by setting an example ourselves even if it requires funds to spread whatever advances we might make freely to the rest of the world, including the Iron Curtain countries?

INTERNATIONAL EXCHANGE

Dr. RAVDIN. We not only do this in our own country, Senator, but within the last 6 weeks, Dr. Stuart Sessoms, who is now the Director of the Cancer Chemotherapy Center and I went to Europe and there over a period of several days met with the best of the cancer experts on the European Continent so that we might get information from them as to what they were doing and we took with us the information from our own work in this country and we left with them material that they might know what we were doing in the direction of our effort and they gave us similar material from their own. This was true international cooperation.

EXCHANGE OF RADIOACTIVE ISOTOPES

Senator MONRONEY. Could I ask if you, as a cancer expert, are satisfied that we are doing enough? That we are moving freely enough the radioactive isotopes and other things that might be useful to this research? Recently in the Interstate and Foreign Commerce

Committee we had some long discussions of the prohibitions against medical isotopes going back to 1947 recently in the Interstate and Foreign Commerce Committee and I wondered if that is now moving without impediment by Government departments or by the Atomic Energy Commission.

Dr. RAVDIN. It is not only going along without impediment, I think it is being implemented. Within the next few weeks there will be held in Philadelphia—just as there has been held over this entire country—there will be held in Philadelphia at Hahnemann Medical College a 2-day program on the utilization of isotopes not only for research but within the clinical areas which you have defined. Each of us is sending from our institutions people to the various areas and agencies within the Government for periods of 4 to 6 weeks so that they might know more broadly what is being done. I received a letter yesterday from the medical director of the Brookhaven Laboratories that was informing of the setting up of a similar type of program covering a period of about a week for individuals who would be invited so that they might know more broadly of the techniques necessary within these areas and take it back to their own institutions. That conference will be held next fall.

Senator MONRONEY. I think that is fine. I just hope there will be some funds or some personnel available so that instead of constant statements from sometimes high military sources of the catastrophic creation of hydrogen and atomic bombs, we can let the world know of our interest and of the emphasis that we are placing on the lifegiving advantages of atomic energy instead of its life-destroying capabilities.

IMPORTANCE OF MILITARY RESEARCH

Dr. RAVDIN. Historically that is very important, sir, because if you think of the first alkaline agents made available to us, nitrogen mustard—I think it is historically correct that the first of it was probably taken with Lord Mountbatten's raid on the French Coast which brought England into this country. I had some of it in my own laboratory. It was rapidly made in this country. It was an agent made to destroy man which has proved to be very useful in extending man's life.

Senator MONRONEY. Thank you very much, Doctor.

Senator HILL. Doctor, as always, whenever you have been before this committee or whenever you have been before our Legislative Committee, the Senate Committee on Labor and Public Welfare, you have brought us a very able, a very fine, most informative and challenging presentation. We are deeply grateful, deeply grateful.

Dr. RAVDIN. It is a privilege.

Senator HILL. Dr. Farber, we will be delighted to hear from you now, sir.

CANCER CHEMOTHERAPY NATIONAL COMMITTEE

STATEMENT OF DR. SIDNEY FARBER, SCIENTIFIC DIRECTOR,
CHILDREN'S CANCER RESEARCH FOUNDATION, AND PRO-
FESSOR OF PATHOLOGY, HARVARD MEDICAL SCHOOL, AT THE
CHILDREN'S HOSPITAL; CHAIRMAN, CANCER CHEMOTHERAPY
NATIONAL COMMITTEE

GENERAL STATEMENT

Dr. FARBER. Mr. Chairman, Senator Hill.

Senator HILL. Doctor, give a little biographical sketch there for the record, please, sir—the high points.

Dr. FARBER. Mr. Chairman, I am professor of pathology, Harvard Medical School, at the Children's Hospital, Boston, scientific director of the Children's Cancer Research Foundation, a member of the National Advisory Health Council, and consultant to the National Cancer Institute, a member of the Contract Review Board of the Cancer Chemotherapy Service Center, and chairman of the Cancer Chemotherapy National Committee.

Senator HILL. Thank you, sir.

Your statement will appear in the record.

(The statement referred to follows:)

Mr. Chairman and members of the committee in expressing my deep appreciation to you, Senator Hill, and to the members of this committee for the privilege of appearing once more before you, I would like to acknowledge at once the great debt of the people of our country to you and to Chairman Fogarty's committee of the House for leadership that has been courageous, wise, and far reaching in its achievements. Your deep interest in the health of our people which has expressed itself in constantly increasing support of medical research through the National Institutes of Health has excited the admiration of scientists and doctors throughout the world. We appear here today in strong support of the recommendations of the various citizen experts who have come before you to speak concerning the support of research in the several categories of the National Institutes of Health and of the Division of General Medical Sciences. We make no special plea for the support of research in any one disease category to the exclusion of others, and would like to recognize at once the invaluable role of research carried out on a basic level for its own sake, as well as for its possible application to many different disciplines and categories of disease.

Our assignment today is to bring recommendations concerning the support of cancer research. There is no need to emphasize before this group, Mr. Chairman, the enormity of the problem of cancer, nor the potential of the scientists and physicians of the country to bring an end to this most frightening of all diseases. The increasing invasion of the lives of those in high places by cancer, as reported to a deeply interested world, merely illustrates the enormity of the problem which brings pain, economic catastrophe, and loss of loved ones in families throughout the world. Cancer destroys children, those in the prime of life, and still badly needed by their families and their country, as well as the aged whose last months or years are not those which we would choose for them. In my own responsibility, my colleagues and I care for, at any one time, some 550 patients with cancer which has spread beyond the reach of the surgeon or the radiotherapist. Numbered among these are children with acute leukemia.

You may, with justice, ask with 250,000 people dying because of cancer in this country in 1 year, what progress has been made by means of the steadily increasing appropriations for cancer research made by the Congress during these past 13 or 14 years.

The actual cure rate, Mr. Chairman and members of the committee, has changed in the last 3 years alone from 1 in 4, to 1 in 3—a truly heartening gain which is explained by the addition to the therapeutic weapons of the surgeon and the radiotherapist of new chemical therapeutic agents which have come through the research programs made possible by the Congress.

What are the main directions of research in cancer today—what are the most promising leads—what may we expect from increased support of research—and what are our actual needs for the coming year? May I now turn to a discussion of these questions?

MOST PROMISING DIRECTIONS OF CANCER RESEARCH

There are three great areas of promise, in addition to a large number of individual research leads which are being followed with eagerness by those who have discovered them. The continuing importance of disciplines and areas of cancer research which have lasting value will not be discussed today. Some of these latter may be listed under the terms of epidemiology, studies on the life history and biologic behavior of cancer, perfection of technics in surgery, anesthesiology, radiology, and radiotherapy, and the like. The three directions most promising for immediate exploitation are: (1) Chemotherapy; (2) the search for cancer diagnostic tests which can be carried out rapidly, inexpensively, and with complete accuracy on the entire population; and finally (3) studies concerning causation, leading, hopefully, to prevention of cancer with particular reference to environmental factors (air pollution, poisons, etc.) and the relationship of virus to cancer.

Cancer research centers

The great progress made possible by the increased research support of the last 12 years in many institutions of the country has created the need for even greater support if full exploitation of these discoveries is to follow without delay. There are now available some 78 new anticancer chemicals, hormones, and antibiotics which have passed the laboratory tests used in screening 70,000 materials. These represent the yield from the special program of cancer chemotherapy created by the Congress 5 years ago. About 20 such agents affecting about 30 different forms of cancer are already in wide use on man, some for more than 10 years. Such progress emphasizes the need for well-organized cancer research centers in which facilities for thorough and rapid clinical investigation of the action of these chemotherapeutic agents can be conducted with the support of well-equipped laboratories of chemistry, biology, and pharmacology, manned by experts in these fields. What I am discussing in no way takes the place of the magnificent cooperative clinical effort of the Cancer Chemotherapy National Service Center, carried out under the chairmanship of my distinguished colleague, Dr. Ravdin. In this effort, as you know, there is included the truly first-rate contribution of the Veterans' Administration in the clinical evaluation of new anticancer agents.

There are now, in the United States, only 22 institutions which receive, in support of their cancer research through the National Cancer Institute, between \$100,000 and \$2 million per year. In some instances this sum of money is spread throughout an entire university, including the medical school. In one case, the sum includes National Cancer Institute support for cancer research to two separate medical schools and one university group in three different locations within one State—California. Only a handful of institutions are devoting themselves to cancer research either exclusively or in great part, and these receive support in a number of different ways.

WHAT IS NEEDED TO ACCELERATE PROGRESS IN CANCER RESEARCH?

If the most rapid progress is to be made, either by discovery or by creation of new approaches, or exploitation of the most promising ones from any source, what we require are the following:

(1) Continued expansion of the splendid research project program of the National Cancer Institute in medical schools, research institutions and university laboratories throughout the country. This includes increases in the number of large research programs, and continuation of the many fine administrative developments for which the National Cancer Institute and the Research Grants Division of the National Institutes of Health deserve great credit;

(2) Extension of the same kind of such project or program support as that given through the National Institutes of Health grants program in the United States, to just as carefully selected institutions all over the world, with the aid of the bill sponsored by Senator Hill and so many of his colleagues in the Senate, and by Mr. Fogarty in the House. This health for peace bill will go down in history as one of the truly great accomplishments of the United States in behalf of the health, and so the happiness and peace of the world;

(3) Continuation of the Research Construction Facilities Act, at the same level—\$30 million per year—until the research construction needs of the country have been met; and finally

(4) Creation of cancer research centers in independent institutions in different parts of the country, where independent programs of cancer research will be conducted with the same kind of support as that received by the National Cancer Institute intramural program in Bethesda. A workable arrangement has been achieved in the field of nuclear medicine in a few medical and biological research installations in private institutions, supported by a special contract mechanism through the Atomic Energy Commission.

CANCER RESEARCH CENTERS

Realistic support of such centers, selected through the National Cancer Institute and its special advisory boards and councils, after careful investigation of the leadership, the environment, and willingness to accept a great challenge, and its accompanying responsibility, will provide answers to some of the most important reasons for failure to make more rapid progress in the several important areas where breakthroughs have occurred during the past 10 to 12 years. These reasons are:

(1) The need for long-term support for clinicians and scientists alike, with tenure given on the same basis as in medical schools to those who are deemed worthy, is apparent after discussions with scientists and physicians in institutions throughout the country. There are worlds of difference to the scientist or clinical investigator between receiving assurance of his salary support for 5 years, or even 10 years on a research grant, and the assurance that tenure will be his when scientific work has earned him the right of tenure. I speak from wide experience because of my deep interest in the development of medical research in all parts of the country when I say that provision of this kind of support for scientists and clinical investigators, equivalent to that in the civil service in the intramural program of the National Cancer Institute in Bethesda, would serve to keep in research many of the finest brains we are now losing to practice or to industry.

(2) The need for resources to pay for bed care and the salaries of all the necessary personnel to make possible the finest of patient care, which must be accomplished before clinical investigation can be considered, is apparent in every institution which is willing to undertake the challenge and responsibility of cancer research involving both laboratories and wards. Such total support for the clinical costs is to be found only in the Clinical Center in Bethesda, where the number of patients is limited to 125, or in a few State institutions and veterans' hospitals, in which cancer research programs are being conducted. Only limited numbers of beds in private institutions are available for the kind of clinical investigation which is required.

Recommendation for the establishment of cancer research centers

It is recommended, after suitable study by those officially concerned in the National Institutes of Health, that centers in a number of places in the country be set up, either by expanding those which presently exist, or by the creation of new ones. It is not recommended that all centers be of exactly the same kind.

Advantage should be taken of the opportunities for research and the availability of materials for research (as illustrated by the problem of air pollution in certain cities of the country), and the hospital and laboratory facilities which might be used much more effectively by strengthening the financial structure, as suggested earlier in this discussion. The creation of centers in places where large numbers of patients with various forms of cancer are found will make for far better care for those patients, as well as for acceleration of clinical investigation. In such centers, too, the practical evaluation of newly developed cancer diagnostic tests can be made, and, if laboratory facilities and scientists are available, the development of such diagnostic tests may be added as one of the goals.

And, finally, if the present research programs concerned with viruses and cancer should reach the stage of development of significance, such centers, with a large number of patients under ideal conditions of clinical investigation with appropriate laboratory support, will be in a position to give expert and reliable evaluation of possible vaccines in the shortest possible time.

It is recommended that the sums involved, varying from a few hundred thousand dollars to perhaps \$2 million per institution, be considered. The recommended sum of \$11,800,000, to be added to the National Cancer Institute appropriation for this purpose, is made so that the program will be implemented immediately and the necessary administrative and council decisions made during fiscal 1960.

VIRUSES AND CANCER

Mr. Chairman and gentlemen, you will recall that in the appropriation for fiscal year 1959 there was carried the sum of \$1 million, specified for development and research on viruses and cancer through contracts or grants. It is more than 50 years ago that a direct causal relationship between a tumor in animals and a virus was established. There are a few important landmarks in subsequent research in this field. On the basis of accelerated interest in this field because of the work of authorities such as Dr. Peyton Rous, Dr. Shope, Dr. Wendell Stanley, and others, and because of the confirmation of the important discoveries of Ludwig Gross in the Bronx Veterans' Hospital on the causation of mouse leukemia, and of Dr. Stewart of the National Cancer Institute and Dr. Eddy of the Bureau of Standards, it was thought, a year ago, that the time was ripe for an expansion of research in this field. It was hoped that through the creation of a special focus of interest in the National Cancer Institute on viruses and cancer, experts in virology could be attracted. It was our belief, too, on the basis of happy experience with the cancer chemotherapy national program that the creation of a focus of interest under the auspices of the National Cancer Institute would make for much more rapid communication of the results of research, and facilitate progress also by the exchange of materials, adoption of uniform experimental techniques whenever indicated, and the stimulation which comes from discussions of problems of mutual interest. These hopes have been achieved. It was found that only one-fourth of the million dollars was required for contracts. The remainder of \$750,000 was then put into the research grants pool because this seemed to be a more appropriate mechanism.

In fiscal year 1958, \$750,000 was in use for the support of 37 projects concerning viruses and cancer. Because of the appropriation in fiscal year 1959 of this \$1 million designated by the Congress for this purpose, an expansion of \$1,250,000 for 23 new or expanded projects was added to the three-quarters of a million dollars of the previous year for a total of \$2 million, or 6.8 percent of the total research grants program of the National Cancer Institute. Of these, \$1,700,000 of ongoing grants are already committed for fiscal 1960. I have learned that for the June 1959 Council meeting, there are 22 requests for research in this field, totaling \$1,179,880. It is estimated that approximately \$800,000 worth of grants in this field will be approved at the June meeting, making a total for 1960 of \$2,500,000 already committed. A searching analysis of the probability of additional requests that will be approved during fiscal 1960 gives a figure of about \$2 million, for a total of \$4,500,000 of research grants in the field of viruses and cancer.

a. Contracts—Virus and cancer

The most effective use of contract funds in this field concerns the provision to investigators of stem cancer cells, of tissue culture cones, and of human tumor material for investigators. There were no facilities available for the procurement of materials of such vital nature to investigators in this field prior to the congressional action in establishing a \$1 million appropriation for virus and cancer 1 year ago. In anticipation of the needs for contract materials, it is estimated that \$500,000 will be required for contracts earmarked for virus and cancer.

Recommendation.—We deem it of great importance to continue the stimulus to research concerning viruses and cancer precipitated by the congressional appropriation in fiscal 1959. This can be accomplished by the following recommendations:

1. An earmarked sum of \$500,000 for contracts in virus and cancer research;

The inclusion of \$4½ million for research concerning virus and cancer in the "Research grants" appropriation of the National Cancer Institute. Requests for funds would be in free competition with all other requests for research support coming to the National Cancer Institute. This is now the case with requests for research grant support in cancer chemotherapy. Because of this, no special earmarked sum is recommended for virus and cancer research but an amount deemed sufficient is included in the overall recommendation for research grants. It is recommended further that a report be given to the Appropriation Committees each year by the National Cancer Institute concerning the exact number of research programs and projects in this field and the amount of money they represent in addition to a report of progress in this exciting, challenging, and rapidly expanding field of cancer research.

Possible significance of research concerning virus and cancer.—Within the past few weeks at least five virus or viral agents derived from mice with leukemia and capable of causing leukemia in other mice have been shown to be productive of antibody formation. Two investigators in the National Institutes of Health

have been able to prevent multiple tumors caused in mice by the passage of their recently discovered "se polyoma" virus when they gave pretreatment to the mice with rabbit serum containing antibodies against the virus. Equally impressive has been their production of active immunity in hamsters by vaccination with a material made from virus grown in tissue-culture fluids. Without such vaccination, 67 percent of hamsters developed tumors and died because of them. In the group of animals vaccinated with this virus preparation, 97 percent of the vaccinated animals lived for 5 months without developing tumors. Other scientists supported by funds appropriated by the Congress and allocated through the National Cancer Institute have demonstrated the effectiveness of several vaccines in protecting against some of the forms of leukemia in chickens. The goal of such research is, of course, the acquisition of sufficient basic knowledge and the development of techniques to permit similar discoveries in man. Such discoveries have not yet been made in the case of human tumors. If such evidence is found in any one of the cancers which affect man, the possibility is great that a vaccine against that particular virus may be prepared. It should be emphasized that if viruses, or viruslike materials, cause any of the many forms of cancer in man, it is likely that there will be many different causes for the many different diseases grouped under the word "cancer." It should be emphasized also that while these important discoveries in the laboratory with the use of mice and hamsters and other laboratory animals suggest the possibility that similar findings may be made in man, we have not yet reached that stage in this research program. The laboratory research is so impressive, however, that we would be derelict in our duty if we did not support research concerning viruses and cancer to the full extent of the available scientific potential of the country.

Cancer chemotherapy

This is the largest program supported by the Congress in the National Cancer Institute. It has been reviewed in detail in the past 5 years before this committee. In Dr. Ravdin's testimony, there is further consideration of the important progress which was made possible only because of the interest of the Congress in the possibilities for an attack of great promise on the problems of cancer in man. There are two main budgetary divisions here. The first concerns the research grants. Requests for cancer chemotherapy grants are exposed to free competition with all requests for research support in any other field of cancer research. No separate budgetary recommendation, therefore, is made for the research grant portion of chemotherapy activity.

The second budgetary division concerns the activities of the Cancer Chemotherapy National Service Center which operates from Dr. J. R. Heller's office under the direct responsibility of Dr. Stewart Sessoms, Chief of this center, who succeeded Dr. Kenneth Endicott. It might be mentioned here that the Cancer Chemotherapy National Committee expressed its great admiration and deep appreciation for the outstanding leadership of Dr. Endicott during his 4 years as Chief of the Cancer Chemotherapy Service Center, and congratulated Dr. Heller and Dr. James Shannon for making possible the great success of the chemotherapy program. It is already clear in the few months since Dr. Sessoms has assumed responsibility for the center that his choice was a splendid one.

A word about the cancer chemotherapy program. Its achievements are such that evaluation is simple. The organizational pattern in synthesis and procurement of chemical compounds and antibiotics, the screening and drug evaluation, the selection of anticancer compounds for man, and finally the beautifully organized clinical cooperative programs carried out in more than 400 separate programs throughout the country all give evidence that the program has come of age.

Recommendations.—1. There are earmarked, for fiscal 1959, \$3,800,000 for programed grants. These include funds for the clinical cooperative groups and for a few of the large recial vertical programs of chemotherapy research. Careful scrutiny of the needs of the cooperative groups show that the addition of \$1 million under the heading of programed grants for a total of \$4,800,000 will be required if full exploitation of the preparation for clinical progress is to be achieved. The availability of more than 70 new anticancer agents emphasizes the importance of the increase.

2. Cancer Chemotherapy National Service Center administration (this is included under professional and technical assistance). If the center is to meet the demands of the program as a whole, and not lag behind, an addition of \$250,000 to the total of \$1,097,000 in fiscal year 1959 for a total of \$1,347,000.

3. Cancer chemotherapy contracts. In fiscal year 1959, \$18,142,000 were available for contracts. Nearing the end of fiscal 1959 we find that \$2 millie

in contracts have been approved but not yet paid and that \$3 million of contracts will be approved without being paid for the end of fiscal 1959. We shall begin fiscal 1960 with a backlog of \$5,400,000 of new contracts which our 1959 funds could not support.

As Chairman of the old Contract Review Board and a member of the new Board which passes on such contracts, I paid particular attention to the contract needs of the program. A conservative estimate is that the momentum gathered by the program as a whole will require approximately \$5 million in new contracts above the \$5,400,000 in contracts left over from 1959. The total recommendation, therefore, for contracts for fiscal 1960 is \$28,542,000.

Direct operation

A word of pride may be permitted in the achievements of the National Cancer Institute intramural program. Members of the staff were pioneers in cancer research and were responsible for fundamental contributions long before the recent great acceleration of interest and participation in this important field. The first large chemotherapy of cancer program in this country was started and sponsored in the intramural program. The pioneering in tissue culture techniques in the biology and experimental pathology of cancer, radiobiology, epidemiology, the various fields of chemistry which bear upon cancer, and more recently, the important breakthrough in the relationship of viruses and cancer, particularly in the mouse, all illustrate the quality and diversity of the research interest. The long-awaited clinical center has made possible the entrance of the intramural group into badly needed clinical investigation.

As a citizen, I am proud that through congressional action, physical facilities and financial support have been brought to create conditions which are as near to ideal for cancer research as exist anywhere in the world. This program must be continued and must receive the support which its productivity has earned.

It is recommended that the budget for direct operations be increased to a moderate degree and the figures included in the table are suggested.

Other directions of research in cancer—research grants budget

No attempt will be made in this testimony to specify further the many important bases of work which are being conducted by able investigators nor is it to be understood that the failure to mention others and the choice of those which have been selected implies that new directions of research, or old worthy ones, are not to be supported. In the budget as recommended, there is ample opportunity for investigators with new approaches, and investigators who are pursuing investigations of many different kinds, to receive support in open competition with those in chemotherapy or in the field of viruses and cancer, or the applications of surgery or radiotherapy or epidemiological considerations. A careful study of the trend of grant requests, the percentage of requests approved, and the increasing interest in cancer research as ideas developed and as facilities become available, leads to the recommendation that we will require an addition of \$12,100,000 to the 1959 appropriation of \$30,214,000. This addition contains a sum sufficient to increase the indirect costs from 15 to 25 percent (approximately \$3 million).

Diagnostic research and development program

On the advice of the Appropriation Committees, the Congress appropriated in fiscal 1959 the sum of \$1,120,000 for contracts and research designed to focus interest on the development of diagnostic tests which must be simple to perform, inexpensive, and capable of application to the population as a whole. Coupled with that recommendation of the Congress was the search for methods to characterize the hormonal status of both the normal and the cancer-bearing human. It was recognized that this was one of the most difficult fields of research. The practical need and widespread good that would come from the discovery of reliable tests of this kind cannot be calculated. Certain it is that earlier discovery of many forms of cancer in man cannot be achieved unless progress of this kind is made. These earmarked funds caused another focus of interest in the National Cancer Institute in this field. Experts in the many disciplines which bear upon research of this kind were brought together through the National Cancer Institute, and contracts have actually been let already far ahead of the minimum time expected. The awarding of these contracts, which may be taken as evidence that there is hope for progress was anticipated by the conclusion of experts after a series of meetings "that although the problem is a difficult one, it was by no means unsurmountable, and that increased efforts to stimulate support and undertake intensive research in the diagnostic areas was timely, justified and indicated." It is recommended, therefore, that under the heading

of professional and technical assistance there be earmarked the sum of \$1,020,000 with no increase over fiscal 1959 and that a special report be given to the Appropriation Committees of progress.

I would urge that investigators who accept the challenge of research in this field be given adequate long-term support and be assured freedom from pressure while they explore a field of research which has been so difficult and disappointing in the past.

General Research and Services (Division of General Medical Sciences)—“Noncategorical Research and Training Grants”—administered on the advice of the National Advisory Health Council

You heard yesterday afternoon the carefully prepared testimony of two of my colleagues in the field of medical science, Dr. Philip Handler and Dr. Lewis Thomas, who spoke in behalf of a budget for the Division of General Medical Sciences in the amount of \$45,000,740. This marked the second time that a detailed presentation of the opportunities for important progress in medical science, through adequate support of the basic sciences of the programs concerned with the aging process and nursing research, and of the several disciplines such as those of medicine and surgery as distinguished from the categories of disease was presented before this committee. For the past several years you have given me the opportunity to say a few words concerning the needs of this important Division of the National Institutes of Health grants program. It was heart-warming indeed when, last year, on the advice of your committees, the Congress increased the appropriation for general research and services from about \$13 million to about \$26 million. This forward step was designated for the support of fundamental research projects and for the expansion of training programs in the basic medical and biological sciences.

As a member of the National Advisory Health Council this past year, I have had the opportunity to have a close view of the activities made possible by your action. I want to join my colleagues, Drs. Handler and Thomas, without reservation, in support of the requested citizen's budget for the Division of General Medical Sciences for fiscal year 1960. In so doing, I would like to express my conviction that no development of the NIH is more important for the progress of medical research than the great expansion of the research and training programs of the Division of General Medical Sciences. I wish to take this opportunity, too, to express my admiration for the devotion and vision of those of Dr. Shannon's staff in this Division, who have been responsible for administrative accomplishments of the highest order—Drs. Hunt, Stone, and Willey.

Total cost of research—indirect costs

Mr. Chairman and members of the committee, it is my earnest hope that this year will bring a satisfactory solution to the problem of indirect costs, or what I prefer to call the total cost of research. The ablest administrative minds in medical schools, universities, and private research institutions have arrived at an average figure of 25 percent, which is 10 percent more than the current allowance for indirect costs on research grants. I recognize that there is considerable variation in different institutions, with lower figures attributed to the formula employed. May I leave to others who testify from the point of view of the administration and board of trustees of medical institutions, the many reasons in defense of either a formula for the true indirect costs, or the adoption of a flat 25 percent for indirect costs. I would advance only one reason, and this on the basis of my own investigation in many parts of the country for the failure of many institutions to work at their capacity in medical research. The conclusion which is inescapable is that unless the indirect costs are raised at least from 15 percent to 25 percent, the momentum of medical research will be slowed down and many institutions will be actually forced to advise their staffs not to apply for more funds. I am aware, Mr. Chairman, that there is more than one way of meeting this problem, and that many are in favor of meeting this and many other problems which beset medical schools and universities today by actual Federal aid to education, openly and honorably given and accepted. Such a suggestion should be investigated with great care by appropriate groups within and outside the Government before action is taken. It would be unfortunate, Mr. Chairman, if issues such as Federal aid to medical education were to be confused with the problem at hand, and be responsible for preventing an immediate solution of the need of scientific and medical institutions for more full reimbursement of indirect costs.

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I join my distinguished colleagues in many different fields throughout the country, therefore, in urging the provision for fiscal 1960 of a flat rate of 25 percent for indirect costs.

Recommended appropriation for the National Cancer Institute for fiscal year 1960

	1959	President's budget, 1960	Citizens' recommen- dations, 1960
Grants:			
Research projects:			
General.....	\$23, 182, 000	\$23, 759, 000	¹ \$34, 300, 000
Programed grants in chemotherapy.....	3, 800, 000	3, 800, 000	4, 800, 000
Field investigations.....	2, 400, 000	2, 400, 000	2, 800, 000
Total.....	29, 382, 000	29, 959, 000	41, 900, 000
Cancer research centers.....	0	0	11, 800, 000
Fellowships.....	1, 427, 000	1, 427, 000	2, 097, 000
Training:			
Teaching.....	2, 490, 000	2, 490, 000	2, 490, 000
Traineeships.....	800, 000	800, 000	1, 050, 000
Research training.....	2, 760, 000	2, 760, 000	3, 250, 000
Total.....	6, 050, 000	6, 050, 000	6, 790, 000
State control programs.....	2, 250, 000	2, 250, 000	2, 250, 000
Total grants.....	39, 109, 000	39, 686, 000	64, 837, 000
Direct operations:			
Research.....	10, 653, 000	11, 404, 000	11, 854, 000
Review and approval.....	797, 000	840, 000	960, 000
Professional and technical assistance:			
Direct field studies.....	1, 961, 000	1, 965, 000	1, 965, 000
Diagnostic development.....	365, 000	952, 000	1, 120, 000
Virus contract activities ²	250, 000	² 250, 000	500, 000
Cancer Chemotherapy National Service Center.....	1, 097, 000	1, 097, 000	1, 347, 000
Cancer control (Bureau of State Services).....	81, 000	518, 000	518, 000
Total.....	3, 754, 000	4, 782, 000	5, 450, 000
Chemotherapy contracts.....	18, 142, 000	18, 142, 000	26, 642, 000
Administration.....	356, 000	364, 000	460, 000
Total direct operations.....	33, 702, 000	35, 532, 000	45, 366, 000
Total NCI obligations.....	72, 811, 000	75, 218, 000	³ 110, 203, 000
Unobligated funds.....	2, 407, 000	0	0
Comparative transfer to BSS.....	50, 000	0	0
Total NCI estimate.....	75, 268, 000	75, 218, 000	³ 110, 203, 000

¹ 25 percent, indirect cost on increase of \$2,600,000 based on President's budget.

² Reflects transfers to grant activities for virus work.

³ Discrepancy between recommendation to the House committee and this sheet is accounted for by error in addition.

EFFECTS OF CANCER RESEARCH DURING THE PAST 15 YEARS ON THE PATIENT WITH CANCER

1. During the past 3 years an important change in the cure rate of patients with cancer in the United States has become evident. The statisticians in the American Cancer Society and the National Cancer Institute now calculate that one in three patients with malignant forms of cancer is now cured. This is a heart-warming increase from the figure of one cure in every four patients with cancer which prevailed for the 8 years prior to 1955. There are a number of factors which enter into this important gain:

Improvement in care, anesthetics, surgical technics, preoperative preparation, and postoperative care; prevention of complications such as infections and pulmonary embolism, in addition to the great therapeutic advance made possible by the discovery of chemicals, hormones, and antibiotics with anticancer activity. These chemical agents, under certain conditions, may render inoperable cancer once more operable either alone or in combination with radiotherapy. Such chemotherapy, too, may in some tumors, such as that arising from skeletal muscle, render the tumor sensitive to radiotherapy when ordinarily it is not.

The use of these newly discovered chemical agents, as part of the total care of patients with cancer has intensified the therapeutic attack against cancer by

providing one more additional weapon against the cancer and in favor of the patient. The advantage to the patient with incurable or advanced cancer cannot be calculated even though he understands that chemicals capable of causing cures are not yet at hand. The use of those chemicals presently available, when combined with surgery and radiotherapy, may prolong his life, or in growing numbers may actually produce cures. What is conveyed to the patient then is that research has produced something of great importance for him, and that is life can be prolonged the tremendous program of cancer chemotherapy research, made possible by appropriations through the National Cancer Institute by the Congress, may produce a breakthrough in time for him. The 5 years of tooling up in this great cancer chemotherapy cooperative program have been used to the best advantage. Research workers throughout this country have learned to work in close cooperation in voluntary programs and have developed more rapid means of communication of the results of research to one another. Cooperative teams are working at all levels from the organic chemistry laboratory to screening laboratories, to studies designed to test the safety and mechanism of action of these chemicals before they are used on man, and finally in these more than 400 cooperative clinical studies under the direction of Dr. Ravdin.

The appropriations for this cancer chemotherapy national program have made it possible to speed up communications between and among research workers in countries all over the world, so that patients everywhere are receiving the benefit of discoveries no matter where they are made and without delay. The more than 20 chemical compounds, hormones, and antibiotics now in use throughout this country with at least temporary effects against more than 30 different kinds of cancer in man are soon to be joined by the 78 anticancer materials which have emerged from the first 5 years of the national program with its study of more than 70,000 chemical compounds. This, then, is not the time to retrench—this is not the time to stand still—this is the time to expand as rapidly as the scientific and medical resources of this country permit. Along the directions of greatest promise in the laboratory and in the clinic, where 250,000 patients who are to die this year of cancer are waiting for something more than can be done for them now.

Some clinical results of cancer chemotherapy

At least 20 agents—chemicals, hormones, and antibiotics—are in use in hospitals throughout the country against acute leukemia, chronic leukemia, Hodgkin's disease, lymphosarcoma, and many other forms of cancer, such as that of the ovary, the breast, the prostate, the kidney, the thyroid, and many other organs and structures of the body, including the brain. These include nitrogen mustard and related agents, such as thio-TEPA, Chlorambucil, Myleran, Cytosan, Melfelan, which are effective against Hodgkin's disease, lymphoma, chronic leukemia, and a number of cancers in the various organs of the body. Another group of substances which specifically inhibit the nucleic acid which is required for the growth and division of cells, include the first compounds to be effective against acute leukemia in children, aminopterin, and the closely related material, methotrexate. In this group are included 6-mercaptopurine, so important in the treatment of acute leukemia, and 5-fluorouracil, and a series of closely related materials which are receiving intensive study at the present time.

There are antibiotics with anticancer effects of great temporary value, such as Actinomycin D and Mitomycin C. In many hospitals these compounds, and a number of others, are used either alone or in conjunction with surgery and radiotherapy to achieve better results than have been obtained before against cancer of the ovary, malignant melanoma (sometimes called black cancer), highly malignant tumors arising from skeletal muscle (the rhabdomyosarcoma), or the kidney, and many other kinds of cancer. Months and even years of life have been added to the lives of patients even though no single uniformly effective or curative chemical has so far been found.

A few examples may be given:

1. Death from acute leukemia in children occurred usually within a few weeks to a few months at the most after proof of the nature of the cancer. The action of chemicals, and hormones (methotrexate, 6-mercaptopurine, ACTH, cortisone) aided by everything that total care of the sick patient implies, has brought about an increase in survival in more than 900 children we have cared for in one institution in the past 12 years—50 percent were still alive 14 months after onset—10 percent were still alive 2 years and 8 months after the onset—and a small number of children have lived from 4 to 8 years and 2 months with leukemia recurring in all the patients who no longer survive.

Those who have made the greatest efforts in the treatment of children with acute leukemia, and who participate in the search for new antileukemic chemicals, feel certain that these great clinical improvements and increases in survival will one day be succeeded by actual cure.

2. The first antileukemic chemical, aminopterin, was discovered in 1947 and was followed within a month by a closely related material called methotrexate. Nine years later this same antileukemic drug, methotrexate, still in use as one of the most valuable methods of treatment, was discovered by scientists in the National Cancer Institute to cause just as striking regression of a rare but very important form of cancer, called the choriocarcinoma. This, too, is not curative but the improvements in the patient and the increase in survival have been of major importance.

3. A recently discovered nucleic acid inhibitor, 5-fluorouracil and closely related compounds, originally synthesized in the Cancer Institute in the University of Wisconsin, has been shown by clinicians there and in other institutions to have temporary but important effect upon very advanced cancers arising in the lower intestine, in the lung, and in other locations. Related materials have been shown at the Sloan-Kettering Institute to have a brief but important effect on the course of acute leukemia in children.

4. Endoxan, studied initially in the University of Pennsylvania by Dr. Ravdin's team, has been used effectively against lymphomas and similar tumors, cancers of the lung, kidney cancers, and also against neuroblastoma in the child.

5. An example of the combination of surgery and chemotherapy in the successful treatment of what was originally a hopeless condition is illustrated by the following story.

Frank, a boy born just 14 years ago, was found just 9 years ago to have a huge tumor of his right kidney. At operation it was discovered when this tumor was removed that an offshoot of the tumor was visible on the surface of the liver. This ordinarily would be regarded as a sign of incurability. This offshoot was removed. Seven months later another offshoot was found in the left upper lung. At that time the most promising chemical was the first one used against leukemia, and this was given to the child, and this solitary offshoot was removed surgically. Just short of 2 years later another offshoot, this time in the lower part of the left lung was discovered. This was removed successfully. Radiotherapy had been given to the site of the original tumor and there was no recurrence there. Chemotherapy was maintained until 4 years ago. This boy is now alive, vigorous, and strong. He has not been ill a moment since more than 6 years ago—the time of his last operation. He has had at least three indications which in past years would have been taken as evidence of incurability.

The aggressive attack against the cancer given as part of the finest total care to this boy, permitted the combination of surgery, radiotherapy, and chemotherapy to do what no one of them could have done alone, and what could not have been accomplished before this recent era of chemotherapy.

6. *Antibiotic*.—In 1940 the great Dr. Selman Waksman while searching for antibiotics against infectious disease, discovered one called actinomycin D which was not effective enough against infectious disease and appeared to be too toxic to be worthwhile. In 1954 we were able to demonstrate the anticancer properties of this compound, through the cooperation of Dr. Waksman. It proved to be the most powerful chemical against several forms of cancer in the mouse. It is still too toxic to be used generally, and its value is greatly restricted because it must be used in such small doses. We did discover that it could increase the strength of radiotherapy and when used with radiotherapy could cause destruction of tumors that could not be effected by radiotherapy alone. The most effective use of this compound has been against the rhabdomyosarcoma which arises from skeletal muscle in many parts of the body, the Wilms' tumor which arises in the kidney and spreads to the lungs very early, frequently before the tumor can be found, and the Ewing's tumor which is one of the most malignant of all cancers in young people and arises usually in the arms, or the legs, and then spreads to the lungs and many other parts of the body. To illustrate this phase of cancer chemotherapy we cite the following:

N. N., a boy 4 years old, was discovered in January 1958 to have a tumor of his left kidney, and at that time there were already many nodules, characteristic of offshoots of the tumor, in both lungs. Because this situation was already incurable, surgery was delayed to see if improvement could be made by the use of radiotherapy and the antibiotic. A month later the tumor of the left kidney was removed, and it was discovered at that time that the offshoots which had spread to the lung were no longer visible by X-ray. Repeated courses of chemotherapy

were given. At the present time, 1 year and 5 months since the discovery of the disease, and 1 year and 2 months since the last evidence of cancer could be demonstrated, the boy is in excellent health. It is too soon to speak of his outlook. What has been produced by this combination of treatments up to the present time, is something which has never been produced under similar conditions before.

A similar story could be told for Ewing's tumor, arising in the arm or in the leg, with offshoots to the lung at the time of discovery of the original tumor. Combination treatments, including radiotherapy and chemotherapy are now producing these extraordinary improvements which must still be called temporary until a sufficient time has passed to permit more definite statements.

NEWER APPLICATIONS OF CANCER CHEMOTHERAPY

Two important developments within the last 2 years, and particularly during the past year, are adding to the effectiveness of cancer chemotherapy. The first concerns the use of bone marrow transfusions and the second the pump oxygenator perfusion of tumors.

Bone marrow transfusions.—Research carried on in many laboratories in this country, and inspired originally by some observations on mice in England by Loutit, have aroused the hope that one of the greatest drawbacks to the effectiveness of chemical anticancer agents presently available may be overcome. This concerns the toxic effect on the bone marrow of all anticancer chemicals when used in sufficient amounts. It is clear that if larger amounts of these chemicals could be employed a greater effect upon the tumor might be achieved. Many attempts have been made to use bone marrow from donors and much research has to be done to make such marrow effective when given to patients.

At the present time it is possible to withdraw marrow from the patient before chemicals are employed and then after storage in the deep freeze, under very special conditions it is possible to inject the patient's own marrow sometime later into his bloodstream and so restore his bone marrow when it is depleted or harmed by larger doses of anticancer chemicals than we would otherwise dare to employ. This technic is being explored very rapidly in many institutions. It is our hope that in individual instances far better results may be obtained with existing cancer chemicals than is now the case.

Pump Oxygenator Perfusion

Within the last 2 years and particularly within the last year, the observation of Creech and his colleagues in New Orleans, that larger amounts of chemicals could be brought directly to the cancer, particularly in the limbs, if a machine of the nature of the heart pump, used in open heart surgery, was employed to isolate the circulation of the limb from the rest of the body for a short period of time when the chemicals would be given a chance to come in close contact with the cancer cells, without entering the body in large enough amounts to harm the bone marrow and other organs. This technic has been employed not only for the limbs, but also for the perfusion of cancers of the lower part of the body, of the lungs, the intestines, and even the brain. It is still too early to evaluate results, but I have no hesitancy in stating that in individual instances, when all of the circumstances necessary for success are available, this technic will provide not only increase in survival but even actual cure.

Such technical advances will be of great importance for the individual patient. They are important in other ways, too, for they have provided one more justification for increasing the aggressive attack against cancer in man even when it looks hopeless. These great advances may be regarded as important holding operations, while the efforts in behalf of the patient carried out in research laboratories throughout the country are carried on with increased speed as fast as resources permit the search for anticancer chemicals to proceed.

SUPPORT OF CANCER RESEARCH

Senator HILL. Now, you just proceed in your own way, Doctor.

Dr. FARBER. Thank you.

Senator Margaret Chase Smith and Senator Monroney; it is a privilege to be here once more to appear before this committee, Mr. Chairman and members, in behalf of the whole medical research program carried on throughout the National Institutes of Health.

We appear here today not in behalf of any special area of research to the exclusion of others, although we are going to talk mainly about cancer. But we would like to speak in behalf of the increase recommended by the various citizen experts who have the opportunity to appear before you for the various categories of disease in the National Institutes of Health and also, in behalf of the Division of General Medical Sciences which was so ably represented yesterday by my colleagues, Dr. Handler, and Dr. Thomas.

Our assignment today is to bring recommendations concerning the support of cancer research and to make specific recommendations concerning it.

I want to speak of my appreciation, Mr. Chairman, for your moving words concerning the late Secretary of State whose funeral is being held this afternoon. The wave of emotion which is sweeping the country and obviously affecting those who were deeply concerned over Mr. Dulles has called renewed attention to the enormity of the problem of cancer. The grief which is visible today is something which will be witnessed for the same reason in some 250,000 homes in this country this year. It is something which will be witnessed in millions of homes the world over. The International Research Institute bill which the chairman of this committee sponsored and which the Senate so magnificently passed the other day, calls attention to the world aspect of the problem of cancer and to the availability of brainpower the world over which can help in the solution of this enormous problem.

The deep interest of your committee in leading the fight against disease by increasing year after year the appropriations for medical research carried on in and through the National Institutes of Health deserves the gratitude of the entire American people. I want to bring to you as you have had brought to you from so many witnesses before, the deep respect and gratitude of the scientists and physicians of the country for the leadership of this committee and its counterpart in the House through the last 13 or 14 years. I know of nothing in the history of medicine to equal this tremendous record; there has never been the opportunity in the whole history of science and medicine for the making of progress as rapidly.

So when we talk of budget this year, as in past years, we are going to think of only two considerations.

The first, what is the enormity of the problem of disease and, second, what is the potential of the country and of countries elsewhere throughout the world to solve these problems? Everything else has secondary significance. This includes even the very important fiscal problems with which the Congress is wrestling today.

EVIDENCE OF PROGRESS IN RESEARCH

The chairman asked the question which comes to him repeatedly: what evidence of progress is there that has been made with the aid of these sums of money which have been appropriated through the Congress? I am going to tackle this very directly today and give evidence that great progress indeed has been made.

I would like to point out today three areas of cancer research which are moving along more rapidly than others at the moment. In doing this I make no selection at all in favor of these and against other areas

of cancer research. There is opportunity in our recommended budget in the research grants portion for the support of any man or woman in the country with an idea which is worthwhile pursuing. Such ideas can be put in project request form and judged by juries of their peers in the study sections and the Cancer Council. These have just as much chance of being supported as any of the directions which I say are of special interest at the moment.

These three areas of interest are: First, that concerned with viruses and cancer; second, that concerned with the search for diagnostic methods which will make it possible to diagnose the presence of cancer by examination of a small amount of blood or some body fluid; and third, that concerned with cancer chemotherapy to which Dr. Ravdin has made reference.

May I address myself to each one of these three areas for the moment? In doing so may I make reference to budgetary items in the sheet which I hope is before you, Mr. Chairman and members of your committee. If it is not, I shall be happy to supply new ones——

Senator HILL. Thank you, sir. We have it, Doctor. Thank you, sir.

Dr. FARBER. Fine. The first area has to do with viruses and cancer. This committee remembers the brilliant presentation of our colleague, Dr. Wendell Stanley, just a year ago in behalf of a program of increased support to see if the research advances concerning the role of viruses in animal cancer may be applied to the problem of cancer in man.

VIRUSES AND CANCER

It has been 50 years since we have known that a virus was capable of causing one form of cancer in animals. That was a form of cancer related to the kind of leukemia that we see in children. During these 50 years progress has been slow. But there have been certain landmarks that have given great encouragement to investigators. There was that of Dr. Peyton Rous of the Rockefeller Institute in 1911 when he discovered the transmissibility of the sarcoma in chickens—which bears his name. And Dr. Shope, now of the Rockefeller Institute, has his name attached to a transmissible papilloma—a benign tumor—which occurs in a rabbit's ear. This question of transmissibility of cancer reached a new level of interest within the last 10 years when Dr. Ludwick Gross, working in the Bronx Veterans' Hospital in New York City, was able to show that under certain experimental conditions which he had arrived at with great ingenuity he could actually transmit a substance from one leukemic mouse to susceptible mice of the same strain and produce leukemia. This was not accepted at first because of the difficult experimental conditions which were required. But within a few years several independent investigators did indeed repeat his work and some of the investigators building on that have gone on to very exciting new discoveries.

Two women in the National Institutes of Health—Dr. Sarah Stewart in the National Cancer Institute and Dr. Margaret Eddy in the Bureau of Standards—have done a brilliant piece of work by demonstrating that not only could they produce leukemia in susceptible mice but transmitting something derived from the leukemic mouse at first, but they could produce some 26 different kinds of cancer in susceptible mice. This has thrown open a whole new world

of opportunity, because we have been accustomed to saying that cancer represents 250 different diseases and that it is very likely that we will have to have a different cure for each one of these 250. When we think of a vaccine against cancer which can follow the discovery of a virus as the cause of a tumor, we have been accustomed to thinking perhaps we will need 250 different vaccines and that would make this approach a practical impossibility.

Senator SMITH. Mr. Chairman.

For clarification—did you say 250 types?

Dr. FARBER. Different kinds of diseases. There are about 30 common forms of cancer. There are about 250 apparently unrelated diseases, all of which are grouped under the word cancer. All of these were grouped there because they caused swelling, to begin with, or a tumor, because they infiltrated or invaded the tissues in crablike fashion, which is the origin of the word cancer, and because they have the vicious habit of killing. But we are dealing really with many different disorders.

Senator HILL. Therefore many different problems?

Dr. FARBER. Therefore many different problems and, therefore, I think some explanation for the enormous complexity of the research fabric which is required in order to solve these problems.

VIRUS AS CHEMICAL SUBSTANCE

If we get away from the word virus as we understand it in the case of poliomyelitis or encephalitis—let us think of a virus as a chemical substance which is being defined more and more accurately now in precise chemical terminology. If we think of that chemical substance passing from one cell to another—from a diseased cell to a normal cell and there setting up a chain of events which becomes a cancer—in a cell which is prepared to become a cancer. I have two parts to this equation, too: Let us think in terms, not of different viruses or different chemicals, but perhaps of one chemical that is common to all forms of cancer—if we get to a basic enough level.

If this should be found to be the case in animals and if a similar state of affairs should be found in the case of some human tumors, if not all of them, then perhaps we will be able to have a vaccine which may be effective against more than one kind of cancer. I have used the word “if” several times here advisedly because everything that I have said about viruses and cancer applies at the moment to animal cancers.

VIRUSES AND HUMAN CANCER

There has as yet been no proof that a virus is responsible for human cancer of the kind that we generally talk about when we use the word “cancer.” But I want to say, also, that the kind of studies which have been done on animal cancers are just beginning to be done in the case of cancer in man. The greatest impetus for this attack in this direction came last year when a special program was supported through the congressional action through these committees, and a sum of money was set aside for research in the field of viruses and cancer.

I am happy to tell you that that sum of money has been greatly oversubscribed, that research workers who have never been in this field of cancer, who are distinguished in the field of virology are now already at work on the problem of viruses in animal cancer and turning their attention to a search for some means of entering into the problem of viruses in human cancer.

We anticipate that this coming year the research grants in the fields of virology and cancer, which aggregate \$2½ million this year, will be \$4½ million next year. In this area alone, Mr. Chairman, and members of the committee, there will be a requirement for at least \$2 million above the appropriation of last year. And we want to be prepared for breakthrough here that will require very much more money. When these breakthroughs come there must be no delay in following the directions of research which those of us who have lived in the field of cancer research for many years believe to be a promising direction of research.

I think next year there should be a report of progress before this committee which will be at least of interest, and perhaps much more than that.

CANCER DIAGNOSTIC TESTS

The second program of great interest at this time concerns the search for a diagnostic test for cancer. I am not referring to the very important and valuable cytologic test of Papanicolou. I am referring to the search for a test which can be carried out very simply, inexpensively, rapidly, and accurately on the entire population at frequent intervals, to determine whether there is a cancer of any kind in the body or to determine hopefully whether there is a cancer of a certain kind.

This diagnostic test search has proved to be the graveyard of more than one scientific reputation. This is one of the most difficult areas in which to work. It is a field of research which seems to have no end for this reason, because of the apparent hopelessness of it, or difficulty, or because of the fact that many, many years will be required on the part of any one research worker with perhaps nothing at the end of this time to show for his work.

Research workers have been loath to enter this field. So, last year, this committee made a special appropriation of \$1 million to support research in this very important and very difficult field.

I am happy to tell you that four contracts have already been awarded, and are in operation, that five contracts for research in this area are being considered by the committee at this time.

I am also very glad to say that the feeling of hopelessness on the part of research workers is beginning to disappear after a series of meetings of men in science and medicine from many different disciplines.

I would urge that this program be continued and that the same support at the same level be continued for a second year, until there is evidence of a direction of research that ought to be followed out more rapidly. I would urge also that those who are courageous enough to work in this difficult field be given ample time, without disturbance, without frequent requests for reports, so that they may carry out their research under the best of scientific conditions.

CANCER CHEMOTHERAPY

There is this third area which Dr. Ravdin has already introduced: Cancer chemotherapy. This is one which was started again through the action of this committee in 1953 with an appropriation of \$1 million for the study of the chemotherapy of leukemia. In 1954 this was broadened to include all forms of cancer at the request of all of your advisers, Mr. Chairman and members of the committee. This program today has become the largest voluntary cooperative venture in medical research in the history of our country in peacetime. It is magnificently organized. The members of the committee, I am certain, have been given a copy of this booklet on cancer chemotherapy reports put out by the Cancer Chemotherapy Center.

You will see the complexity of the organization, the representation of all of the areas of organic chemistry, pharmacology and biological methods used in screening and entrapment. There are a series of panels and committees. Then you will see also the clinical panel, which is under the direction of my distinguished colleague, Dr. Ravdin.

Now this program makes it immediately possible to achieve several goals. This can be used—and is being used—as a model for other smaller ventures in the whole field of medical research. In the first place, it was possible to bring together scientists and physicians from all over the country to help in the planning of a truly national effort. In the second place, it was possible to do, on a large scale, what no single institution could ever possibly afford to do in the search for chemicals, hormones, and antibiotics, with anticancer activity.

COMMUNICATION OF RESULTS

Finally, in addition to the subjects which Dr. Ravdin touched upon, we were able to put into being a system of communication of the results of research which was not only necessary for the peace of mind of physicians throughout the country, but vital for the progress of research in this area. We have close communication with research workers all over the world. In international meetings which have been held, the first of which was 3 years ago this month, in Oslo, we were able to have the opinions of representatives of many countries of the world. Three such international meetings have been held. Just about 6 weeks ago I attended a conference at Geneva of WHO, with representatives of eight countries, to set up a world cancer research program, and the heart of it was this cancer chemotherapy program.

In my statement, Mr. Chairman and members of the committee, is a description of the program itself. I will not take your time up on that, but I would like to take this opportunity to bring up two more points and then, with your permission, I would like to show you some lantern slide photographs to illustrate some of the progress of research in this area.

The one new area of support which I would like to bring before you for your consideration today, with a strong recommendation that it be supported, concerns the creation of cancer research centers.

CANCER RESEARCH CENTERS

The immediate stimulus for this arises from the fact that coming from this large cancer chemotherapy cooperative program there are, after a study of some 70,000 chemical compounds, antibiotics and hormones, available for study in man and for application to man with advanced cancer, some 78 new compounds that have not been studied before. These have passed all of the requirements in our screening program. They have been studied for toxicity, for pharmacological action. We know their importance against animal cancers, and they are now ready to be applied to man.

This figure of 78 is to be added to some 20 compounds which are presently in use as anticancer agents in hospitals throughout this country. Some of these have come from this program, some have come from the research of people like the splendid research group in the Chester Beatty Cancer Institute in London. In addition to the splendid cooperative groups under Dr. Ravdin's direction, where more than 450 separate studies are now going on in more than 150 separate institutions or groups, there is need for much more rapid evaluation of these compounds in places where there are not only patients but also laboratories manned by experts in pharmacology and biochemistry and biology, who can give to the clinician the important information that he must have if he is to evaluate quickly and accurately the anti-cancer drugs which he has a chance now to study.

These 78 will be joined by many more as this program goes on.

So the thought has come up spontaneously from many parts of the country that in addition to the fine program that we now have, and the splendid work going on in Bethesda at the National Cancer Institute, there should be created independent programs in independent institutions throughout the country, in effect, a great increase in cancer research. While continuing what we have in Bethesda, we would add new complete centers in 10, 12, or 15 places in the country, where the correct environment can be found in a university atmosphere, and where leaders can be found who are willing to accept the challenge of this tremendous opportunity.

For this reason, I have put into the budget a suggestion here called the citizens' recommendation, in the sum of \$11,800,000, to make a beginning in the establishment of these cancer research centers in 10 or 12 places in the country.

SAME GRANTS PROGRAM APPLICABLE

I want to make quite clear that the same grant mechanism that we now have for the establishment of grants through the National Cancer Institute, could apply here, with the use of the study sections and the council concerned. The administration of the National Institutes of Health should work out the criteria which will be employed in the establishment and choice of these centers and the amounts of money allotted. We might recall here the great achievements in the agricultural experiment stations, which are supported by Federal funds in the land grant colleges. This program is 40 years old. It has stability

and independence, and provides for the development of research of strength and originality. It is something like this that might be worked into the fabric of our National Institutes of Health. I think that the gains would be tremendous. It would bring at once far better care to patients who could be brought to such a center or whose treatment could be guided by the center while continuing to be cared for by their own doctors. It would permit of more rapid evaluation for anticancer chemicals. It would provide also for the rapid evaluation of possible vaccines which are certain to be brought out sooner or later. These may be a failure or a good direction of treatment, but at least they will be tested quickly, so that the laboratory research may be reoriented without delay. Finally, when the cancer diagnostic tests begin to emerge there must be places where such tests can be evaluated rapidly, with fairness, and with the assurance that we will not lose something of great value from the research program by inadequate study on man.

INDEPENDENT PROGRAMS

So I would like to submit now, for a second time, in more concrete form, the recommendation which I brought up last year, that in addition to the great Cancer Institute in Bethesda, Federal funds be used for the complete support of independent programs, in independent institutions connected with existing institutions, universities, or research institutes or, for those created anew, in parts of the country where such do not exist. The creation of research centers, staffed by full-time staffs of high caliber, will act as models for centers in other categories of disease.

SUMMARY OF RESEARCH CENTER PLAN

In summary then, such research centers should be broadly conceived and aim for the creation of unique national facilities including the several sciences basic to cancer research, suitably equipped with the tools of biochemistry, biology, and physics, as applied to medicine. They should include complete facilities for the proper care of the patient with malignant disease, the treatment by the various kinds of radiotherapy of proved and experimental value, and the possibilities for utilization of the many techniques of clinical investigation as applied to cancer. Such cancer centers should provide facilities for:

1. The rapid, accurate, conduct of preclinical and clinical pharmacology and evaluation of anticancer compounds both in the laboratory and on the ward, and the mechanism of action of such compounds when used alone or in combination with radiotherapy, and other forms of treatment.

2. Facilities and expert manpower for the creation and testing of new methods of diagnosis, particularly cancer diagnostic tests or evaluation of the hormone status of the patient with cancer.

3. Facilities for the discovery and perfection of possible vaccines against viruses, if and when they are discovered as causative agents of cancer in man, and for the rapid and authoritative evaluation on patients of such possible vaccines.

Byproducts of the creation of such centers will be the formation of undergraduate, postgraduate, and lay educational programs which would flow into and from such centers. These centers will also be

responsible for the communication of the results of research and the dissemination of information to the doctors in the area concerning diagnosis, treatment, and research.

DEMONSTRATION OF PROGRESS

Finally, Mr. Chairman and gentlemen and members of the committee, may I demonstrate to you a few examples of progress made possible by your appropriations for cancer research?

What I am going to demonstrate here in these lantern slides is something which is now going on in all parts of the country. What I show you could be taken from research programs of Dr. Ravdin, or groups in New York, in California, Chicago, and many other parts of the country. [Exhibiting slides.]

Here is an example of screening for anticancer compounds by the use of mice. We have implanted a mouse cancer into a mouse. In one mouse, you see a large tumor, a breast tumor, which grows rapidly and reaches the size you see in about 3 weeks' time. No treatment was given to this mouse. This may be compared with this mouse which received an anticancer chemical. After 11 days of treatment we achieved complete destruction of this form of cancer in the mouse.

If we had been able to produce anything like this in 1945, the program that we are talking about and the budget we are talking about today would have been in effect in 1946. Unfortunately, it has taken years for the discovery of classes of agents which now can cause this kind of destruction of tumors in the mouse.

We have such an enormous program going on through the Cancer Chemotherapy Service Center, under Dr. Sessoms, formerly under Dr. Endicott, that we must raise more than a million mice a year, in addition to those available in the country before, for testing. This kind of testing is carried out in large programs with the aid of contracts.

I want to mention here that all of this work I am talking about at the laboratory level is being carried out with the active support of the industry, which in this past year alone has poured more than \$7,600,000 of its own money into cancer chemotherapy, in addition to the contracts that have come through the service centers.

We now look at human cancer growing in the cheek pouch of the Syrian hamster. On the left, you see a very vicious form of cancer which affects the child in this case, a fibrosarcoma, and you see how it grows in the hamster.

The one on the right was just as large as the one on the left, and after 8 days of treatment with an anticancer chemical, you see how markedly shrunken this tumor is, because 90 percent of it has been destroyed after only 8 days of treatment.

It is possible to completely destroy this kind of human cancer growing in the hamster.

We now have a number of programs in the country for an evaluation of anticancer chemicals against human cancers in the Syrian hamster, and in the specially prepared rat and mouse and in tissue culture.

One of my colleagues alone is responsible, with a group of seven technicians and one professional assistant, for the study of the behavior of some 30,000 hamsters with human cancer in 1 year against a variety of anticancer agents we are studying. This was made possible by a

contract of the Cancer Chemotherapy Service Center for this specific purpose.

Next I will show you photographs of patients.

WIDESPREAD USE OF CHEMICALS

I could have chosen these from any one of the 150 institutions in the country where this work is going on, but I do want to make the point, Mr. Chairman and members of the committee, that today we are not talking about the restriction of chemical agents against cancer in man to one institution or two or three or five. I am happy to report that because of the program which this committee put into operation originally, anticancer chemicals are now being employed as part of the total care of thousands of patients all over the country.

This is an example of lymphosarcoma, which may arise in any part of the body, or the spleen or the liver or the skin, as you see here. This, we could destroy with X-ray or a number of chemicals today. If we removed it surgically, we would be removing only one part of the disease, because this is in many parts of the body.

You see here what was done with one chemical after a very short period of time. We have complete destruction of something which was a big tumor by an anticancer chemical given by mouth.

The problem of acute leukemia is illustrated by this little girl on the left, miserable, unhappy, some 6 months after the onset of her acute leukemia. She had had one period of improvement caused by one anticancer chemical. We see this child as she looks today, normal in appearance, healthy, and happy. She is still alive now, almost 6 years since the onset of the acute leukemia.

Up to 1947 the outlook for acute leukemia in children was a matter of a few weeks to a few months. Rarely did the child live for the duration of a year. Today, in an experience with some 900 children, whom I have known personally since January of 1947, 50 percent are still alive 14 months and 10 percent are still alive 2 years and 8 months after the diagnosis was first made. We had one boy live as long as 8 years and 2 months, more than 7 years of which found him apparently normal, and a scattering of children alive 4, 5, and 6 years. There is still no cure for acute leukemia, but the restoration to normal life, when remission occurs, is a restoration to good life, and not merely to just living.

This represents one of the most challenging areas of cancer research because of the enormous social and family implications here, and it represents one of the areas where greatest promise in cancer chemotherapy is expected.

Now the next one is a slide which I showed before this committee a few years ago and I show it again, because we want to show progress.

EXAMPLE OF COMPOSITE TREATMENT

This represents a tumor which arises from skeletal muscle, a rhabdo-myio-sarcoma in this case, from the muscle of the eyelid, and when this tumor is not cured by early surgery, no cure was possible by any other method because it is not sensitive to radiotherapy. This tumor had been removed twice before in another city, and then it had grown out of the eye to a size larger than the side of the child's face. The eye had been taken out a year before in another city.

With this apparently hopeless outlook, a chemical was given by mouth for the first time under these conditions because of laboratory research. For the first time, this highly malignant, pain-producing, horribly disfiguring tumor was destroyed in almost its entirety, and after only 2 months of treatment. At that time radiotherapy was added in small amounts to the chemotherapy. In 6 weeks there was apparently complete disappearance of the rest of the tumor.

This wonderful result was not to be enjoyed by the unfortunate 17-year-old girl very long because 6 months after this was accomplished she died because of meningitis. It was found at her death that all the cancer had been destroyed. This tragic experience gave promise that certain huge tumors could be attacked with chemical agents and by a combination of X-ray and chemical agents. On the basis of this experience, a series of children with "incurable" tumors of the eye have been treated. We demonstrate a small one which caused destruction of the eye. It is the same kind of tumor as the last and would have gone on in the same way if we would have permitted it to. Working on the basis of the last experience, X-ray and a chemical, an antibiotic were employed. I want you to see the expression of hope and optimism on this fine boy's face. He is alive, in good health, almost 2 years since his eye tumor was destroyed by radiotherapy and chemotherapy and surgery. We are able to do what we could never do with any one of these forms of treatment before, certainly not with X-ray and surgery alone. This then is the followup of the progress started by temporary success with the little girl who had the huge cancer of the eye.

Mr. Chairman, you do remember those photographs, I know.

Senator HILL. Yes.

OTHER EXAMPLES OF COMBINED TREATMENT

Dr. FARBER. Mr. Chairman and members of the committee, I will now illustrate several kinds of cancers which have been treated with temporary success for the first time because of the great progress made possible by the Cancer Chemotherapy national program, inaugurated through congressional action. The details of these case reports, which I shall illustrate, are found in the prepared statement and so will not be repeated here. They illustrate that highly malignant tumors of the skeleton, such as Ewing's tumor, may be treated with survival and good health for at least 3 years by the combined use of radiotherapy and an anticancer antibiotic without amputating the arm or leg. Until 3 years ago we ourselves always advised immediate amputation of the extremity, as soon as the diagnosis of Ewing's tumor was made. Cures have been very rare by surgical treatment, or by means of surgery and radiotherapy. This has been one of the most discouraging and unhappy of all forms of cancer and occurs particularly in children and young adults. Spread from the primary tumor to the lungs occurs very early and accounts for loss of the patient. With the combined use of radiotherapy and an anticancer antibiotic destruction not only of the primary tumor has been achieved, but also the offshoots of the primary tumor which had spread to the lung. Whether this will be curative only time can bring an answer, but certainly it is possible to achieve destruction of primary tumors and secondary spreads which we had never achieved before.

Similar success may be recounted in the case of Wilms' tumor with spread to the lungs from the primary kidney tumor. The great achievements in chemotherapy have extended the usefulness of surgery far beyond anything seen heretofore. The action of chemical agents in increasing the effectiveness of radiotherapy on some forms of cancer has opened up new horizons. By the use of the combined techniques of surgery, radiotherapy and chemotherapy many patients with advanced or hopeless, or "incurable" forms of cancer are receiving temporary improvement of marked degree, increase in survival time, and in a small number of instances, which is increasing very quickly, the word "cure" may soon be employed when sufficient time elapses.

NEW METHODS OF ADMINISTERING CHEMICALS

The effectiveness of the anticancer chemicals presently available is being greatly increased by the addition of new methods of administering these chemicals. In my prepared statement reference is made to the use of the pump oxygenator, employed originally for the performance of open heart operations, and the use of catheters passed into the arteries and into the aorta, which represents a technic borrowed from congenital heart diagnostic technics. By the application of these technical advances to the patient with cancer, it is possible to introduce chemicals directly into the tumors in many locations in the body, including the brain, and so achieve a far greater concentration of the cancer-destroying chemical in the tumor than we have been able to heretofore. A similar statement may be made concerning the use of bone marrow transfusions. If we can regenerate the bone marrow which is harmed by the administration of too much anticancer chemical, we are in a position to use very much more of the anticancer chemical against the tumor without permanently harming the patient's bone marrow, and so the patient. This is then an exciting period in progress in cancer chemotherapy, and one which is heart-warming for the patient.

It is my carefully considered belief that these statements concerning striking temporary benefit to the patient will, within the immediate future, be replaced by a gradually increasing number of actual cures of patients with cancer regarded generally as incurable before the days of chemotherapy.

I hope, Mr. Chairman and members of the committee, that these examples of progress made possible by the appropriations of the congressional committees, will bring a deep satisfaction to you; such satisfaction is richly deserved. What this research progress means to those of us who care for patients with cancer regarded as incurable, you can well understand.

Surgeons, physicians, and radiotherapists, and all others interested in the patient with advanced cancer, now have tools to work with in the form of new technics and therapeutic agents which give them justification for a more vigorous attack than ever before in behalf of the individual patient with widespread advanced, or incurable cancer.

And with the constant encouragement to those who actually take care of patients with cancer, given by the tangible evidence of the great momentum in the laboratory programs which produce these chemicals, there is more reason than ever before for rejecting the word "incurable," and replacing it by a philosophy which will not permit the admission of defeat before everything that research can produce is brought forth for the benefit of the individual patient * * * and, for the patient with advanced cancer there is the assurance that if survival can be prolonged by the results of research, perhaps actual cure can be achieved, if only the patient is alive when the next forward step is made.

I would like to leave these pictures with you in your minds as examples, I repeat, which could be taken from clinics, in many parts of the country today. This is work which depends upon the research of people in many laboratories in many institutions, and now in many parts of the world; but what I have shown you in the last few minutes would not have been possible, I have no hesitation in saying, without the splendid support made possible through congressional action and through the action of the Appropriations Committees.

We then have reached a point, Mr. Chairman and members of the committee, where we cannot go back. Cutting down such a program would constitute a crime against man. We cannot stand still because promising leads are too important and the need for their evaluation is so imperative. We can do only one thing, and that is to proceed just as rapidly as the scientists and doctors of the country can progress with the facilities available. The budget presented today represents the best possible use of money that can be made at this moment and if in error, is in error on the conservative side. If I have any apology at all or any note of regret in leaving this discussion, it is that we are not in the position at this minute to request more, so pressing is the need and so great is the potential of the country.

Senator HILL. Are there any questions, gentlemen?

Senator SMITH. I have no questions.

Senator MONRONEY. No questions.

Senator HILL. We are certainly most grateful to you, Dr. Farber.

May I say that if this committee and the Congress of the United States has been able to make any contribution in this matter of medical research, these causes that you and Dr. Ravdin have so well presented here this morning, it is because of the tremendous help and the great inspiration that we have received from men like you and Dr. Ravdin.

You have never been before this committee that you have not been tremendously helpful and you have always given us such fine and challenging information; you have always told a story that moved and inspired us, and we want you to know we are deeply appreciative of your being here this morning and also deeply appreciative of your presence, too, Dr. Ravdin. We are very grateful to both of you.

Thank you very much.

AMERICAN PSYCHIATRIC ASSOCIATION

STATEMENTS OF DR. FRANCIS J. BRACELAND, PSYCHIATRIST IN CHIEF, THE INSTITUTE OF LIVING, HARTFORD, CONN., CHAIRMAN, COMMISSION ON POLICY, AMERICAN PSYCHIATRIC ASSOCIATION; AND MR. PAUL JOHNSTON, MEMBER, BOARD OF TRUSTEES, NATIONAL ASSOCIATION FOR MENTAL HEALTH

GENERAL STATEMENT

Senator HILL. Now we will hear from Dr. Francis J. Braceland and Mr. Paul Johnston.

We are happy to have you gentlemen here. Have you any preference as to the order of presentation?

Mr. JOHNSTON. Well, he is a professional and I am an amateur, so I will yield to him.

Senator HILL. All right, we will hear from Dr. Braceland. Doctor, you are psychiatrist in chief, the Institute of Living, Hartford, Conn., and you are also chairman of the Commission on Policy, American Psychiatric Association.

Dr. BRACELAND. Thank you very much, Mr. Chairman, and Senator Margaret Chase Smith and Senator Monroney.

REQUEST FROM AMERICAN PSYCHIATRIC ASSOCIATION

I first would like to bring you the greetings of the American Psychiatric Association. I speak for 11,000 psychiatrists, and that is a significant number because when we started to appear before your committee there was not even half that number. I would like to say, too, for the association, that we are most grateful to you and your committee and to the committee of Mr. Fogarty in the House, because you have been the friends of mental health when mental health had very few friends.

Now you will note in my little biography that I was the chief of psychiatry in the Navy during the war, and that at present am engaged as Reserve consultant to the Surgeon General.

We went through a most difficult task when we lost a lot of men who might have helped the Government. We lost men when we needed men. Now we come before you to ask your help again.

I might say that the specialty which I represent could be said to be an "under the counter" specialty. There are not too many who have been willing to look earnestly and sympathetically at the problems we present, and that would help us.

I watched in openmouthed admiration my colleagues who preceded us here, and who have been doing such excellent work with cancer, an illness which is tangible. But, Mr. Chairman and members of the committee, I represent a group in which the illness is neither tangible nor is it traumatic in any way. It is just a quiet form of heartbreak which now, throughout the country, is being repeated every hour and which destroys a lot of young minds quietly and undramatically.

DISTRESSING CHARACTER OF MENTAL ILLNESS

You know, and it would be needless for me to go into the statistics when you know them as well as I, but 900,000 to 1 million people are

going to go through mental hospitals or be in them some time this year.

One has but to take the only son or daughter of a man from him at the doctor's office and watch that man as he goes back over his memory to find out what he might have done to help that child who is now ill. Worse than that, one of us has only to have a mother get hold of him and plead, "Can I go home, Doctor, to my baby?" to know how distressing, though undramatic, this illness is. It is the most distressing of all illnesses to bear. The task and the way ahead have been very difficult.

You know what the situation was before your committee and Mr. Fogarty's committee started to help. It was appalling.

ADVANCEMENT IN CARE AND TREATMENT

Now the situation has changed and when I look at the conditions and compare them to the conditions 12 years ago, when your committee started to help us, I have no hesitancy in coming before you to ask for further help. There is evidence from every source that the money that has been invested for extending the program has really been of great service and paid rich dividends in progress.

Both in and out of mental hospitals there has been great advancement. There is nothing melodramatic that we can show you or point to, but it has been a quiet form of solid progress. More patients are now released from hospitals after a shorter stay than ever before, and my colleagues who appeared before you yesterday, in excellent fashion, presented those facts to you.

Now community mental health facilities are increasing and there is a growing public awareness of mental disease. The loss of the sense of helplessness, hopelessness, which used to surround it is now apparent.

You see, we began behind the walls of these big grim institutions which were outside the cities, thinking that putting them out there they would be outside the minds of the people. But now we are able to move into the community, and there is a widespread interest in the communities in preventing these illnesses.

As a matter of fact, we have reached a point where we cannot afford to slow down and lose momentum, for these were the first fruitful bits of investment that were made. Now we are able to go ahead.

New needs develop with progress, and we have made a great deal of progress, in training and research programs, particularly.

CONDITIONS RESPECTING MENTAL HOSPITALS

Now I would like to talk to you about mental hospitals because I have lived most of my 28 years of professional life in them.

They have not been, many times, happy places to be in, particularly when there was no one who seemed to understand. Now the situation is entirely different. There is a great deal still to be done, but you have no idea of the change in these institutions.

Mr. Gorman told you yesterday of 13,000 patients fewer in the last 3 years. There is another figure which strikes me as most interesting. Had the curve continued the way it was going, with the increase of population, we would have had, at this present time, 53,000 more people in mental hospitals than we do have today.

Now as one goes to look for these folks, he finds the rise of the general hospital ward, the smaller institutions, the satellite hospitals, which are part of these big institutions, now coming into the community and becoming part of the medical center. All of these changes are becoming more and more apparent. Institutions are arising where older people can be cared for and where they should be cared for rather than in mental hospitals, because many times they can be cared for better.

Now in the minds of many, this is completely due to new drugs. Actually, it began about a year and a half before the drugs came into being.

I want to emphasize that the drugs are an extremely important part of this improvement but also accompanying it is the great improvement in the philosophy of treating the mentally ill.

No longer do we write people off. They used to be written off with "Diagnosis by epithet." There, to call a man a certain name, he was tagged for life and it was thought that he could not get better. That is no longer true, and people are fought for even up through their eighties when we find that many people who appear senile, or arteriosclerotic are not. Rather, they are depressed people, depressed because of the way the present culture treats older people, in which there is no place for them, as there used to be. Many of these folks can be treated and can be helped through more enjoyable years.

CHANGES IN HOSPITALS

Therefore, the changes in the hospitals, particularly in the disturbed sections, are incredible. Now they are habitable. They are much better for people. Still there is this terrible regret that people must go into them because the mental hospital is a social mistake. It was born to get people out of garrets and shelters and jails. It was born when we knew very little to do for them.

It will be remembered that the private hospital, the general hospital, when it began, was likewise not too well thought of, but that has proven its usefulness to people.

Now with the various forms of treatment that we have, the new techniques, we have taken away a great deal of the fear and the dread that people had of these hospitals.

WORK DONE UNDER FEDERAL FUNDS

What if Federal funds had not been spent directly to change things in the mental hospitals? The Federal funds which your committee has appropriated have called attention to conditions in these hospitals and, by means of research and the training that you have provided for them, and also the community services, these things combined have made for this great improvement in the hospitals.

I might say that in all of these other illnesses which these distinguished gentlemen have brought before you, there are emotional aspects involved. And it makes no difference how well a person is physically, if he is not emotionally inspired to carry on his work and to do his duty, then he is in the same position as if he were sick physically.

EMOTIONAL ASPECTS OF MENTAL ILLNESS

You cannot entirely separate, you cannot separate at all the emotions from these illnesses which you have been hearing about now as you have held your hearings. Many times, people who have been brought to a point where physically they are seemingly well, they have been unable to go back to their daily pursuits because of the emotional handicaps which accompany those illnesses.

There is no hierarchy in being sick. In the minds of some folks, there is. It is as if it were not respectable to have a mental or emotional illness. Some consider it is all right to have anything organic which one can point to, but mental or emotional illness they do not consider as respectable.

This, of course, is without any justification whatever and many of the things which look like they are organic actually have their inception in emotional stress and illnesses and also have a large emotional component.

TRENDS IN HOSPITALIZATION AND TRAINING

As you have discussed and as you have appropriated funds for the mental health project grants, new methods of going about handling people in the community have come to the fore. We see not only the satellite hospitals and the breaking up of these big hospitals into small ones and putting them close to a general hospital where the private practitioner, the general practitioner, the family doctor will not forget these patients, but will make rounds on them. There are other things new.

For instance, in the University of Utah, finding that they could not get their information out, they have now put on television programs in order to instruct the practitioners who are in faraway places on the newer advances in this specialty. That was done due to the fact that there were funds appropriated for mental health projects by your committee.

My own institution has initiated a program in which people are having difficulty singly and in their families. They can consult about their emotional difficulties with a doctor or a psychiatrist and, if necessary, anyone else. This has also been done in an effort to hold these families together.

You see, there is a great deal of possibility in these grants, and the money allocated for them is being well spent.

Dr. Kramer, Chief of the Biometrics Branch of the National Institutes of Health, asks some very pertinent questions about the drugs, which point up the further need of research and backup to things which have been told to you about the need for more interest in drugs.

NEED FOR CONTINUITY IN RESEARCH

One thing that always impressed me was the statement by Alan Gregg about the fact that no donor of funds for a single research project can honestly promise a discovery, but, if money is continually given to well-chosen workers, experience shows that sooner or later it will be rewarding.

There was a grant of £15,000 which was made for 7 years to a little hospital in London called Queen Charlotte Hospital, for the study of childbed fever. Under the direction of this particular little man it looked like those funds were not bearing fruit, but out of it came sulfanilamide, and that was not the intention of the investigation at all. But there is no need for me to elaborate upon the boon that this has been to mankind. The same thing was true of DDT.

Senator HILL. There you have given an illustration of where a person was seeking one thing and he did not find the answer to that one thing but he did find another answer which may be of great significance; is that right?

Dr. BRACELAND. That is right, Senator, an example of serendipity, looking for one thing and finding another. The same thing was true of DDT. That reposed on a shelf with nobody knowing what to do with it, and then you know how it came to the fore during the war.

QUESTION OF EFFICACY OF DRUGS

From the examples given, Dr. Kramer suggests that there are some questions yet to be answered. How safe are these drugs for the future? Authoritatively, what are their immediate as well as their long-range effects? What really are the psychological effects of the drugs?

This is coming to the fore now, as new substances are being tried to treat depression. This is extremely important, because many of the patients who are visiting the offices of the general practitioner, and the specialist in gastrointestinal diseases, and others, are really people who are mildly depressed. If it were possible by means of drugs to help those folks without subjecting them to some of the more drastic types of therapy, we would be doing a great deal for people, and we would prevent some of those tragedies that one reads about in the papers.

One example is where the maid coming to work in the morning notices that the garage door is closed and that the car is running, and some capable, young, professional or business man has his life snuffed out. This is extremely important, the trend which this research is taking.

Also, we would like to know this: Are these drugs safe for children, and should one drive an automobile while under the effects of these drugs? And what effects do they have on the learning processes, and so on?

There is a great need for the continuation of research. They not only hold great promise of treatment, but they can be utilized as we investigate various methods of learning.

VALUE OF PSYCHOPHARMACOLOGY

There is no need for me to tell you in detail about the Psychopharmacological Service Center which you set up in 1956 and the 132 laboratories that are investigating these drugs. You know about the one at St. Elizabeths Hospital. I have singled out psychopharmacology because it is a little more dramatic than the others. Nevertheless, that is because it is new and of immediate interest. But I would not want to overemphasize it in relationship to the various other things which are now being investigated.

Besides the important intramural things going on at Bethesda, throughout the country there are various research projects which certainly will bear fruit, studying the problems of mental illness and health from every possible angle.

COMMUNITY INTEREST IN TREATMENT

Now a very interesting thing is happening again with the funds provided by the Government in that there is this developing interest of the community and a strong effort to keep people out of mental hospitals.

You have heard it said in the past that many people, if they were not ill when they went in, might become ill while they were in there. While this was said frequently as a joke, nevertheless there is a certain amount of slipping backward, a certain amount of regressing, which occurs upon giving up and going into a mental hospital. Therefore, any effort which we can expend to keep people out of them by treatment, clinics in the community, by various preventative measures, will certainly lead us a great step forward.

REHABILITATION OF MENTAL PATIENTS

I do not want to take too much of the committee's time, but I would like to speak to you about rehabilitation as it concerns the mental patients. You do know about it from my distinguished colleague and friend, Dr. Howard Rusk, and the wonderful program under Mary Switzer. However, when you apply this to the psychiatric patient and make an effort to rehabilitate a man who has been confined to a mental hospital, the rehabilitation process has about five parts.

The first part of it—and the most important, perhaps—is the vis-a-vis relationship of the patient with the doctor. As this is going on, however, we cannot be with that patient 24 hours a day. The patient should be socially exposed and oriented, brought back into relationship with his colleagues and with people, because we do not become ill in a vacuum. We become sick in relationship to our colleagues and our fellow workers.

Also, while he is in a hospital his education or vocational adjustment should continue and, if possible, he should learn new skills in order to buttress himself as he goes out.

There is the fourth stage of rehabilitation, preparing an individual to go back into a community after he has been sick in a mental hospital. That is a disturbing situation to many people, and we must prepare those people to go back and to acquit themselves creditably.

The fifth part that you have helped in is in preparing the community to receive that patient back, because it matters not how carefully we prepare the person to go back, or how nicely we shine him up; if the community will not receive him and he cannot get a job, we cannot rehabilitate him.

Thus, a variety of these rehabilitative and preventive factors have been provided by the funds which you have appropriated, and technical assistance projects have also been put into action.

Many of the communities would like to do something and would like to help, but they are unable to do this. But the seed money which you have provided has enabled many in turn to match those funds,

and now we see throughout the whole country a renewed interest in the communities and in community health programs. Again, this is so different from the way things were that it is extremely encouraging and we consider it real progress.

MANPOWER PROBLEM

The manpower problem is a great one. In order for us to treat people we need doctors, and we need to keep them in the hospitals. You know of various places where there are five and six hundred patients to one doctor, and you know that they cannot be properly cared for.

In 1 little strip in 1 State there are 40,000 patients in 10 miles with 4 hospitals, 1 hospital with 15,000.

There has grown up down there a Federal hospital with about 7,000 and you can readily see the great need for personnel, such as psychiatric, psychological, nursing, particularly nurses who are there with the patients constantly, social workers, and psychiatric training for medical doctors. Had it not been for the funds which you provided through the National Institute of Mental Health we would not have had this.

When the U.S. Navy went into the war there were 18 psychiatrists qualified, just 18. We started to train our own, because we were in desperate straits and we ended with about 700 in various stages of preparation.

INCREASE IN CERTIFIED PRACTITIONERS UNDER FEDERAL GRANTS

There were about 3,000 certificates from the examining boards. Now, I am glad to say, there are over 11,000 members of the association. Through the stipends which you have provided, men have been trained and are being trained throughout the country who otherwise could not have been trained.

This is most dramatic in the training of the general practitioner, the education of him in the various nuances of mental disease, and each organization now is having applications from three and four general practitioners to undertake regular psychiatric training.

Many of us, too, have large setups in which the Academy of General Practice works with us in order to train these men so that they can handle these milder things outside, such as the anxieties and depressions, so that one does not have to run to a psychiatrist in every case.

This should be part of the work of the general practitioner. All people in middle life and old age ought to be treated by a general practitioner, not by the psychiatrist.

Now, I do not want to take any more of your time. I am very grateful to you.

CONTINUING SHORTAGE OF PERSONNEL

Senator HILL. Doctor, we realize you have a tremendous shortage, do you not, although we have made this fine progress? We still have this tremendous shortage in personnel, do we not, Doctor?

Dr. BRACELAND. If we had twice as many psychiatrists at the moment, Mr. Chairman, we could use them—and still some more.

In some of the institutions of the country the shortage is deplorable, with the people without proper treatment, because of the lack of personnel, and through your stipends for doctors and nurses and psychologists and others, more people are being treated than ever before.

There is no need for me to tell this committee, which knows, I am sure, better than I, all of the fundamentals and all of the things in which it shares an interest.

I suggest, if I may, that I depend upon the wisdom of your committee, and this is a little bit presumptuous to put this forward, but we have considered it very carefully and professionally, in our organization, with the hope that you will see fit to—and I know you will—help us. You always have. I want to assure you this has more connotation than you know, of the fact that people are interested, and that pretty soon now I am sure we will all be respectable in psychiatry and will be able to take our place with the other specialties, and perhaps, be able to show you some real dramatic advances. We hope so, anyhow.

I am most grateful to you for hearing me. I bring you the compliments, the regards and respect of my fellow practitioners.

PREPARED STATEMENT

Senator HILL. Doctor, we are most grateful to you for your very informative and very splendid statement here this morning. We appreciate it very, very deeply. Your full statement may be placed in the record at this point.

(The statement referred to follows:)

STATEMENT OF DR. FRANCIS J. BRACELAND, PSYCHIATRIST IN CHIEF, INSTITUTE OF LIVING

INTRODUCTION

I am Dr. Francis J. Braceland. I am a psychiatrist and have been in the practice of psychiatry for approximately 28 years. At present I am the psychiatrist in chief of the Institute of Living, an old mental hospital in Hartford, Conn. Here today I represent the nearly 11,000 members of the American Psychiatric Association, the oldest of the national medical societies.

I have held various positions in psychiatry, among them the presidency of the American Board of Psychiatry and Neurology, the American Psychiatric Association, and the Association for Research in Nervous and Mental Disease; also the chairmanship of the Section on Nervous and Mental Diseases of the American Medical Association and of the National Health Forum. I was chief of the Psychiatric Section of the Bureau of Medicine and Surgery, U.S. Navy, in wartime and at present reserve consultant to the Surgeon General, U.S. Navy and U.S. Army, and a member of the advisory boards to NIMH and to the Defense Department. I was also a member of the Medical Task Force of the Hoover Commission and onetime head of the Psychiatric Section, Mayo Clinic, and professor of psychiatry, Graduate School, Mayo Foundation, University of Minnesota.

The American Psychiatric Association is appreciative of the opportunity to testify before this committee. It is aware of the fact that it is through the wisdom and foresight of your committee and the courage and dedication of your distinguished chairman, Senator Hill, that the cause of the mentally ill—a group which cannot speak for itself—has been furthered. In the name of the psychiatrists of the Nation and many others of our confreres, we would like to acknowledge to you the indebtedness of those whose task it is to care for these sick and misunderstood patients.

Asking for money, no matter for whom or what, has always been a bit difficult for me, and I am never very good at it. But when I look back at the situation

when I testified in favor of the National Mental Health Act, 12 years ago, and compare conditions then and now, I feel not the slightest hesitancy in coming before you requesting funds for extending the program of the National Institute of Mental Health. For there is evidence on every hand that the money invested in mental health efforts is yielding results.

Both in and out of mental hospitals, there has been great progress. New treatment methods have been introduced and old ones improved. More patients are being released from hospitals after shorter stays. Community mental health facilities have increased in number and effectiveness. There is a growing awareness of the nature of mental illness, a loss of the hopelessness which used to surround it, and a general realization that something can be done about it. There is widespread and growing interest in promoting good mental health at the community level and in overcoming such public mental health problems as alcoholism and juvenile delinquency. More people are being trained as mental health specialists. And most important of all, a great research effort has been mobilized to study, from many different angles, a great variety of problems related to mental illness and health. We have reached a point, in fact, where we can't afford to slow down or stand still, lest we lose the momentum gained in these first fruitful years of investment.

NEW NEEDS DEVELOP WITH PROGRESS

Though we have made great progress, we still have a long way to go. Viewed from a national, overall standpoint, the mental health effort is just getting well underway. There are still enormous needs to be met, even more, perhaps, than when the program started. We still have the old problems with us, and a lot of new ones, too. For progress is dynamic and new needs are bound to develop along with our gains. The program is growing and should have the support it needs to continue to grow. And that means more funds than last year, because the same amount it had last year is not enough to cover its normal growth. Training and research programs are ongoing activities and commitments have already been made for them. They cannot be permitted to grind to a halt. Likewise, there are other areas where marked progress is evident but where problems are compounded with new developments and these in particular need additional support.

PROGRESS IN MENTAL HOSPITALS

Since my work is in the mental hospital area, I have been impressed most by the progress in the care and treatment of the mentally ill in the 12 years since the Mental Health Act was passed. There is recognizable evidence of this progress in the statistical fact that last year for the third straight year there were fewer patients in mental hospitals at the end of the year than at the beginning. This occurred in spite of the fact that first admissions to mental hospitals were up from the preceding year. It is thought by some that this downward swing in hospital populations is due mostly to the advent of the tranquilizing drugs, but this is only one of the factors responsible for the improvement. Actually, there was already noteworthy improvement evident as much as a year and a half before the first of the tranquilizers was introduced in 1953.

Even more important than the drugs, in my opinion, has been the basic change that has taken place in the philosophy of treatment for the mentally ill since the Mental Health Act was passed. The goal of treatment has clearly become to rehabilitate the patient so that he is able to return to community living. This philosophy also includes the belief that the hospital itself must provide a therapeutic environment in which the patient will naturally improve. More attention is being given to the hospital milieu—the physical, psychological, and social environment in which the patient lives from day to day. The concept of the open hospital, so successful in some British communities, has taken hold in the United States in modified form, with strikingly beneficial results in some places.

There are also refinements in our older methods of treatment which we cannot yet afford to discard. New techniques in shock treatment—the use of sedatives and muscle relaxation ahead of the treatment—have taken away much of the patient's fear of this method which has proved so effective in some types of mental illness. Such techniques as group therapy, psychodrama and occupational therapy are being used more and more in both State-supported and private hospitals.

While Federal funds have not been spent directly for improvement in mental hospitals, much of the progress I have noted can be ascribed to the focusing of public attention on conditions in mental hospitals prior to the passage of the

Mental Health Act and to public education by mental health personnel in developing the NIMH program. Much of the improvement also rests on understanding gained through NIMH research and pilot investigations.

MENTAL HEALTH PROJECT GRANTS

Mental hospitals stand to profit directly from the NIMH program of mental health project grants for which Congress passed enabling legislation in 1956. These grants provide public and private agencies, institutions, and individuals with support to conduct studies and demonstrations aimed at improved methods of diagnosis, treatment, and rehabilitation of the mentally ill. These studies will help to develop new and improved methods in mental hospitals, as well as in clinics and other community mental health facilities and services. By their aid new methods and new projects may be tried. They will help to spread information about effective techniques from one community, hospital, and institution to another. Whether the need be to study the effectiveness of auxiliary types of personnel in the treatment setting or the use of the day-care center for the sick in various age groups or that very important undertaking, the assistance of the patient after he leaves the hospital, these project grants help to launch the studies which otherwise could not be undertaken. New ideas arise constantly. At present those Western States which are short of psychiatric training facilities are contemplating a series of TV presentations as teaching devices in psychiatric education. They are exploring possibilities of this, encouraged by the success of the University of Utah School of Medicine, which is keeping physicians throughout the State abreast of medical advances by the medium of television. This is an excellent idea with far-reaching potentialities but it will require funds to start, funds which in the end will surely bring excellent results. The background music behind all of these ventures has to do with either keeping the patient out of the big State hospitals or in getting him out of them quickly.

My own Institute has initiated a project to provide help for people who are having legal difficulty, along with emotional problems and difficulties with other people. The grant, which is sponsored by the Social-Legal Counseling Board of Hartford, Conn., is supporting an agency that combines the old idea of legal aid with free clinical service and spiritual counseling. It offers the help of a woman judge, an attorney, and a clergyman of the denomination to which the person involved subscribes. If he needs emotional assistance, he is referred to the clinic. He is given legal help if he needs that, and is provided also with a spiritual adviser. The agency's service thus cuts across the fields of law, psychiatry, and social work. The project is designed to explore the potentials of such an arrangement to bring these professions together to work cooperatively for the welfare of the patient or client rather than at cross-purposes as so often is true in such cases.

From the examples I have given you, you can see that this recently created grants program offers great possibilities for initiating improvements, fostering progress, and overcoming difficulties in many different areas. There were 65 projects approved for support last year which was the first year of operation for this program. Most of them are continuing projects involving 2 to 5 years of support, which means it will take almost the full amount of money allocated last year to keep them running this year. In the meantime, interest and new ideas are developing and the Institute expects an increasing number of new applications next year. I should, therefore, urgently recommend to you that next year's allocation for mental health project grants be doubled over what it was last year.

DRUG RESEARCH NEEDED

A good example of how progress brings new needs and new problems is the advent of the psychoactive drugs in the treatment of mental illness which we have already mentioned. The rapid development of this type of therapy has opened up a whole new area of research that needs attention and support.

Dr. Morton Kramer, chief of the Biometrics Branch of the National Institute of Mental Health, has written a monograph on the need for more psychopharmacological research. In it, he points out some of the important implications involved in the widespread use of tranquilizing drugs. Among the many as yet unanswered questions which he raises are:

Basically how safe are these agents for the patient?

Authoritatively, what are the immediate as well as their long-range effects?

What really are the psychological effects of the drugs? Do they actually produce depressive reactions or other psychotic symptoms? Is it safe to permit persons to drive automobiles while on these drugs?

Is it safe to use these drugs for children?

What effect do they have on the learning process? And so on.

These questions and many others need to be answered for each of the new drugs that are coming into common use. There were more than 40 of them on the market the last time I counted them. There are probably many more by now and even more in the process of development. All potential psychiatric drugs need thorough clinical and preclinical testing and thorough evaluation, not only for their effectiveness and safety, but also to determine conditions under which they will be most useful. We need to know the different effects of different drugs on different types of psychological disturbances and physical symptoms.

The psychiatric drugs not only hold great promise as treatment tools, but they also can be utilized as extremely valuable tools for learning more about the basic structure and functioning of the brain and central nervous system, both in health and in illness. This opens up a second area in which both basic and clinical research is needed to take advantage of the great potentialities of the psychoactive drugs.

The NIMH Psychopharmacological Service Center, set up in 1956 to encourage and coordinate research in this field, has developed an extensive program with 132 laboratories and study centers conducting grant-supported research. This is a most valuable service and deserves continued support, for the work is being done in medical schools and in other established research centers.

Within the past year, the Institute has also set up its own Clinical Neuropharmacological Research Center at St. Elizabeths Hospital, with the hospital cooperating in an extensive program of both basic and clinical research. St. Elizabeths, as you know, has a large population from which the center can draw for its clinical studies. This makes it possible also to observe and evaluate different types of drug therapy and their effects on different kinds of psychotic symptoms. Dr. Joel Elkes, an outstanding pharmacologist and psychiatrist from Birmingham, England, who heads the project, is interested, too, in making scientific studies on how the use of the drugs affects the attitudes of both patients and staff members and how much such changes in the hospital milieu have to do with the improvement in patient recovery. Laboratories for basic research on the drugs themselves and on the biological and psychological reactions they cause have been installed in one of the buildings at St. Elizabeths, which also serves as a center for clinical studies. This new center, combining NIMH and St. Elizabeths resources, strikes me as a most promising project in this important field of research, and one worthy of all the financial support it takes to get it off to a good start and keep it going.

Though you appropriated \$6 million for the support of research projects and programs in psychopharmacology last year, I do not know how much of it was used for this purpose, as tooling up is a difficult task. I do know that, having launched a thorough search for the information needed to use these new therapeutic tools safely and intelligently, there can be no question now as to the wisdom of providing enough funds to carry the search on through. It is our belief that this work will require not only the full \$6 million this year, but also an additional 20 percent over that amount.

BROADSCALE RESEARCH PROGRAM

While I have singled out psychopharmacology because it is new and of immediate interest I would not want to overemphasize it in relation to the tremendous overall research effort the National Institute of Mental Health now has in progress. With the funds Congress has provided for this purpose from year to year the Institute has been able to direct the efforts of literally hundreds of scientists into avenues of research related to mental illness and health. Besides the important studies NIMH is conducting in its own intramural program, it is currently supporting, through research grants, a great variety of basic and clinical research projects in universities, hospitals, clinics, and laboratories throughout the country. Scientists are studying the problems of mental illness and health from every possible angle and, while these problems are far too many and too complicated to expect major breakthroughs of dramatic causes or cures, the research is constantly yielding knowledge and understanding that makes for progress.

It would be sacrificing much of the investment already made if the scientists enlisted in the NIMH research program failed to push forward in their search for scientific knowledge on which to base treatment and preventive measures. It is a tremendous undertaking and one which will have to be extended indefinitely and at increasing cost if it is to produce even a portion of the knowledge we need to grapple with the complicated problems we face in this field. As one who has

watched this nationwide research effort grow from almost nothing to its present impressive proportions, I urge increased support to the extent of 50 percent, for this invaluable program. Without extensive research, there could be no valid progress in overcoming mental illness, for unless we have knowledge on which to base our efforts, those efforts are likely to be wasted, and may even prove harmful.

REHABILITATIVE SERVICES

I have my own definition of what it takes to rehabilitate a person who enters a mental hospital for treatment and it involves not only what happens to him while he is in the hospital, but also what happens in the community in which he returns.

Rehabilitation of a mental patient, as I see it, consists of five parts. The first thing required is treatment of the situation which the patient presents. That's what he came for and he wouldn't be there if he did not need treatment. The second essential is that the patient receive some education while he is recovering, that he is learning and doing something constructive each day. Idleness is demoralizing. Nothing could be worse for mental patients than just having to sit or wander around with nothing special to do. Some patients learn skills and increase their efficiency while in the hospital and this, in turn helps them to get employment when they are able to leave.

The third factor in rehabilitation is the socialization of the patient. His trouble frequently lies in his inability to get along with others. People don't get sick in a vacuum. It is in their dealings with other people, their close personal relationships, that they get "all fouled up," to use the vernacular. They can't get well without learning how to handle their emotional reactions to other people.

The fourth thing that must be done is to prepare the patient for a return to the community and his family. It is possible for us to help the patient a great deal in the neutral surroundings of our hospital but we must prepare him for the problems which he will meet when he goes out.

The fifth necessity is the preparation of the family and the community for the return of the patient. There is no use preparing patients by the best of rehabilitative procedures if the family or the community will not receive them when they recover.

With the help of new therapies, more patients than ever before recover enough to leave the hospital. But leaving the hospital is not as simple as it sounds. Under some circumstances patients are more likely to regress if they are released from the hospital than if they stay. Some are better off in the hospital than they are at home. Others have no home to which they can return. Some need continued treatment but are able to work or spend part of their day at home. Even those who are completely able to return to the community are bound to have difficulty in readjusting unless the community is prepared to help them.

Thus, a variety of rehabilitative facilities is called for: halfway houses, foster home care, day and night hospital care, sheltered workshops, outpatient clinic and above all, people and places within the community where they can turn for help when they need it.

PREVENTIVE MEASURES

Communities should be well equipped with services and facilities that would help keep people out of mental hospitals. Emergency treatment for mental illness should be made available either in outpatient clinics or in general hospitals. Treatment at the time an illness first becomes apparent, before the psychotic condition becomes deeply ingrained, can often prevent a serious long-term illness. People should not be sent to mental hospitals unless they need mental hospital treatment. One reason why hospitals are crowded is because people are sent there when they can't get care anywhere else. For example, there are hundreds of older people in mental hospitals who would be much better off if they could be cared for elsewhere. Communities should provide services and facilities that would enable older citizens to stay and have their needs met, in their own community. Public health services should include provision for the treatment of alcoholism within the community. Schools and sheltered workshops should be provided for the mentally retarded. There should be more child guidance clinics and more residential treatment centers for emotionally disturbed children.

It takes a lot of money, and a lot of dedicated effort by professionally trained people to set up community mental health programs and keep them running. But with the help of Federal grants-in-aid every State in the Union has been able to at least make a start on establishing this sort of a program. Some of the more densely populated and wealthier States have made really impressive progress.

But even such States as California and New York do not have anywhere near the services that are needed. In rural areas, particularly, there has been scant progress. Most of the clinics and other facilities are located in cities, and there are many rural areas where no help whatever is provided in the mental health, mental welfare field. The Biometrics Branch of NIMH has reported that only 9 percent of the professional clinical services are in rural areas in which 41 percent of the population lives.

I agree heartily with the resolution passed last year by the National Association for Mental Health, in which the association asked that Congress, this year, appropriate at least \$8 million for community mental health services. Money spent in this way is seed money. Communities won't, and often can't, go ahead on their own initiative to set up clinics and services, but once such services are established through the help of Federal funds, the communities that have them wouldn't know how to do without them.

TECHNICAL ASSISTANCE PROJECTS

Scarcity of money is not the only reason that communities fail to initiate mental health programs. They hesitate because they do not know how to go about setting up and conducting such programs. To help overcome this difficulty the National Institute of Mental Health has made consultation and technical assistance available through the regional offices of the Public Health Service.

As an extension of this service, the Institute provides support for technical assistance projects. These are special conferences primarily focused on a particular mental health problem with which the State calling the conference is concerned. For example, Wyoming had a project to consider the utilization of community resources in mental health programs. Another, in Massachusetts, looked into mental health aspects of alcohol education; South Carolina held one on the volunteer resource person in community mental health. Last year 15 States took advantage of this type of grant support, to thrash out some of the troublesome questions they confronted in their efforts to develop new programs or revitalize ongoing ones. These technical assistance projects have proved very helpful, I am told, and continue to be more and more in demand. I hope earnestly that Congress will see fit to provide a budget large enough to cover a far more sizable sum for this purpose than the \$66,000 that was spent last year.

MANPOWER PROBLEM

Obviously, it takes a great number of highly trained, qualified people to organize and carry on a broad scale program of research and action such as that which is called for by the National Mental Health Act. Moreover, most of the required personnel must be drawn from professions which are still new and in which there has been, and still is, an acute shortage of manpower. At the time the act was passed there were very few people trained in the four most needed professions—psychiatry, clinical psychology, psychiatric nursing, and psychiatric social work. And what was more fundamental, there was little opportunity for people to acquire the highly specialized and expensive training required to enter these fields.

The National Institute of Mental Health has made a great effort to remedy this situation through its well organized and well received training program. With funds allocated by Congress, the Institute has provided financial assistance to many medical schools, hospitals, and other training centers to help them expand and improve their facilities so that more and better training would be available in these four disciplines. It has also provided some 5,000 traineeships to help promising individuals take this training.

In spite of these fruitful efforts, there still remains a tremendous shortage of personnel trained in the mental health disciplines. According to Dr. George W. Albee, Director of the Task Force on Manpower for the Joint Commission on Mental Illness and Health, there is one psychiatrist for every 19,000 people in the United States; there is one psychologist to each 11,000 people; there is one trained psychiatric social worker to every 78,000 people.

This shortage of trained people is acutely felt in the mental hospitals all over the country, as well as in the NIMH effort to get the people it needs for its program. To give you an example, a survey recently made in some of the Western States brought out the fact that in one of the State hospitals studied, there were only 18 psychiatrists where they should have 44 to meet APA standards; there were only 5 psychologists where there should have been 12; 44 graduate nurses where there should have been 150; 1 occupational therapist where there should have been 12; and 2 social workers where there should have been 75.

PSYCHIATRIC TRAINING FOR M.D.'S

In my capacity as a member of the NIMH Advisory Board, I note that the Institute is still working hard to provide training and encourage people to train for the four major mental health specialties. In the meanwhile, several other types of training programs have been started which will help relieve the manpower shortage and also make more psychiatric knowledge available to people in key positions for implementing the overall mental health effort.

One of the most promising of these new training programs and one which the American Psychiatric Association heartily endorses, is the one that offers residency traineeships and support of postgraduate courses in psychiatry to practicing physicians.

Since the general practitioner training program was launched, just 6 months ago, the National Institute of Mental Health has received more than 100 applications for traineeships and postgraduate courses. Within a month there were applications for more than \$900,000 of the original appropriation of \$1.3 million. And applications continue to pour in, attesting to the widespread interest among medical practitioners in the psychiatric approach to healing and public health.

Another training program aimed at getting psychiatric principles into general medical practice is the one giving grant support for psychiatric training of medical students at the undergraduate level. This program is already well established. There are active grants, to a maximum of \$25,000, for teaching costs in 86 medical schools and schools of osteopathy. In addition to teaching grants, schools have been offered \$600 student stipends for extracurricular clinical or research training in psychiatry for medical students. This program, initiated in the summer of 1957, has had enthusiastic acceptance and 737 stipend units have been awarded during the current year. Here is a farsighted venture which eventually should help to relieve our shortage of clinicians.

Another new program for undergraduate training for medical students will be activated in 1960. Its purpose is to promote, among medical students, an understanding of human behavior and its importance in health and illness. Grants are offered to medical schools in support of training programs in the basic sciences of human behavior. While this program is not expected to take hold as rapidly as that for psychiatric training, several pilot projects have demonstrated the feasibility of this type of training in medical schools and there is a real need for this program. Applications have already been received from close to 50 medical schools.

Some of the new programs also offer support for psychiatric training for nurses and welfare specialists.

TRAINING FOR RESEARCH

The research fellowship program set up in 1947 has helped hundreds of individual workers in the biological, medical, and social science areas to receive training while they worked on research projects. For more mature scientists, the career investigator program has offered support for advanced study and experience. These programs should be continued and expanded. But they do not meet the need for specialized training for people to do research on problems related to mental illness and health.

To help meet this need, the Institute initiated in fiscal year 1959 a new program of support at the doctoral level to train research personnel in various fields of psychology—child psychology, social psychology, experimental psychology, etc. The purpose of this program is to develop research personnel to undertake work in such mental health problem areas as retardation, juvenile delinquency, alcoholism, and aging. Another important new research training program is the one designed to supplement the traditional training in other related fields, so that each researcher can bring to bear a number of interdisciplinary research skills in working on mental health problems. Under this program, behavioral scientists, biological scientists, epidemiologists, and social scientists will be able to receive doctoral and postdoctoral training in mental health fields. Psychiatrists, psychologists, psychiatric social workers, and psychiatric nurses, on the other hand, will be able to receive postdoctoral training in the research skills and techniques of the biological and social sciences. For the most part these research training programs are new. But a great many applications have been received from institutions that are equipped to give training for mental health research and a number of grants have been awarded.

The Institute has taken the right approach to the manpower problem by directing its efforts toward providing more opportunity to train for work in the mental health field. We cannot hope to accomplish what needs to be done unless

our universities, hospitals, and other training centers graduate enough people with the proper training to do the job. I hesitate to think of the condition psychiatry would be in today were it not for the help of this Institute in training personnel, particularly psychiatrists. I mentioned this in writing up the report of the mental health section of the Hoover report. Conditions would be absolutely chaotic without the assistance of that large number of workers provided for by stipends from the National Institute of Mental Health. The NIMH needs \$9 million more than it had last year to continue its training program, to pay for normal expansion and growth of the older ones, and to encourage the beginning of new programs. The training of competent personnel is the very foundation upon which the whole mental health effort rests. I particularly urge that you give the NIMH training program all the support it can use.

ADDITIONAL FUNDS NEEDED

As the country moves forward toward objectives set by the Congress in the Mental Health Act, as the program broadens in its scope, and as new needs and problems arise, the cost of financing further progress is unavoidably high. We need additional funds to protect the investment we have already made and to make further progress possible in an area so vital to our national well-being.

There is little point in pouring billions of dollars into the skyrocketing science of the physical universe unless we match it with what is needed to achieve and maintain a population of people sound enough in mind and body to cope with the problems brought about by the sudden sweeping changes affecting the world in which we live. Today more than ever before, we need to give attention to the mental health of the Nation.

For these reasons, Mr. Chairman, I feel strongly that the funds for the mental health program should be substantially increased this year. To hold the line is to retreat at the very time that we are beginning to see light. I would like to see at least \$75 million for mental health activities in fiscal 1960. With these funds the Institute could push forward in research in all of the areas outlined above, all of which are essential, and I know that you gentlemen will do what you can to see that our advance, so recently started, will not be handicapped now.

PSYCHIATRIC TRAINING FOR MEDICAL STUDENTS

Senator HILL. Are there any questions?

Senator SMITH. I have no questions.

Senator MONRONEY. Could I ask what percentage of the medical schools require some psychiatric training for their general practitioners?

Dr. BRACELAND. Senator, medic training is going on in all the 4 years of the medical school? It used to be that one was taken to a State hospital, and shown six dilapidated folks, and that was all the psychiatric training that he had. One might resolve that he certainly would have nothing to do with that specialty from that experience. But now there is training in each of the 4 years, and the Academy of General Practice, working in cooperation with the psychiatrists, train their practitioners. The spirit is so much better and the outlook is so much better.

Senator MONRONEY. I asked that question because several years ago the Oklahoma University School of Medicine was given notice that it would lose its rating unless it was able to employ a full-time dean of psychiatric study, and I wondered if that was to spread this training which you have so wisely said is needed by the general practitioners, or whether it was specifically to create more psychiatrists.

Dr. BRACELAND. It was because it is an essential part of the medical program, and I had the pleasure of helping to get you people in Oklahoma a professor, Stewart Wolf.

Senator MONRONEY. He is a wonderful man and has done extremely well and has been extremely helpful.

CASE OF EMOTIONAL COMPONENT IN CURE

Dr. BRACELAND. If I may take 1 minute. There is a man, a professor of medicine, Stewart Wolf, who is interested in psychosomatic medicine and with the most dramatic performance showed that many times the giving of drugs, and the drugs got credit for it, the improvement was due to the emotional aspects and the manner in which these things were given. This has been written up, and it is a classic nationally, about a man who had asthma, who had tried everything, and finally they found the right drug and this drug cured him, and when he was given something else it would not, and so forth and so on, but there was no doubt about it when it happened.

Then they sent for more of the drug, and they had run out of it. Instead of the drug they got an embarrassed vice president of the company that said he regretted to tell them that had been a pseudo in the first place, that they weren't sure of that drug, it had been an inner substance, yet the man was better; and this typifies what I had to say about the fact that over and above the physical facts of all illnesses, you have an emotional component.

A great deal of work has been done by Stewart Wolf on that.

Senator HILL. You certainly have made a fine statement, which we appreciate very much.

Senator HILL. Mr. Johnston comes from Birmingham, Ala., and is one of the outstanding lawyers in Alabama, with a very large and extensive practice; and yet, in spite of all the pressures and burdens of his practice, he takes time, as a fine public-spirited citizen, to give much of his thoughts, much of his efforts, to the cause of mental health. He is the former president of the Alabama Mental Health Association, and is a member of the board of trustees of the National Association for Mental Health.

We would be delighted to hear from you.

Mr. JOHNSTON. Thank you very much, Mr. Chairman, for those kind words.

BUDGET REQUEST OF ASSOCIATION

As a member of the legislative committee of the National Association for Mental Health, I have been asked to present to this committee the recommendations of our association for fiscal year 1960 of the budget of the National Institute of Mental Health, in the amount of \$74 million instead of the \$52 million approximately, provided by the President's budget.

This entails an increase of about \$14 million over the amount recommended by the House report. Our recommendation has been approved by the board of directors of our association, in consultation with the American Psychiatric Association, and after what we think has been a careful evaluation and analysis of the needs of the National Institute of Mental Health.

Principally, the areas involved are, first, research, which has been upped several million dollars; the training of personnel, for which we have recommended an increase of \$8 million; and, finally, in the area of grants-in-aid to the States, we recommend that the program be doubled from the \$4 million provided, to \$8 million.

These comparisons are related to the Executive budget.

Now, I do not know how the increase recommended by the House is distributed amongst these particular activities. We have filed a

statement which goes into some detail as to the reasons for our recommendations.

PREPARED STATEMENT

Senator HILL. Your statement will be inserted in the record in full. (The statement referred to follows:)

STATEMENT OF PAUL JOHNSTON ON BEHALF OF THE NATIONAL ASSOCIATION FOR MENTAL HEALTH, INC.

Mr. Chairman and members of the committee, the many problems embraced by the expression, "mental illness and health," have had increasing attention during the past decade. The public has become increasingly aware that the term represents a complex of interrelated problems. These problems are being analyzed by many groups, using a number of different approaches. We live in an era marked by new cures for old diseases and by dramatic new dangers to our health. The size and importance of our concern for the mentally ill among us are indicated in the following statements:

There are 6,818 registered hospitals in this country.

They admit approximately 23 million patients each year.

Of this total, the percentage of psychiatric admissions is small. Nevertheless, because many mentally ill patients remain sick for a longer time and therefore need longer hospitalization, the percentage of psychiatric patients resident in hospitals on any given day is 51 percent of the total number of patients of all types.

On an average day, approximately 640,000 patients with mental disorders occupy beds in the more than 1,250 public and private hospitals which accept mentally ill persons for diagnosis and treatment. This does not include patients with mental retardation or convulsive disorder. About 85 percent of these 640,000 patients are cared for in our large State hospitals, almost all of which have 500 or more beds.

The 6,818 registered hospitals employ 1,401,232 personnel of all categories. Of the personnel, 17 percent are in psychiatric hospitals. It is calculated that, at a minimum, the direct cost of operating our local, State, and Federal mental hospitals is \$1,700 million every year.

The effect of mental illness on patients brings with it a great deal of suffering and hardship to their families and to others who may become involved. When a person is severely ill, mentally, he is lost to the community. He cannot produce; he cannot earn. He must receive medical care. Frequently his family must be supported while he remains in the hospital.

People are learning that admission to a psychiatric hospital in the early stages of mental illness results in a better chance for recovery. Because people seek treatment earlier, because more facilities and treatment techniques are now available, and, of course, because our population is growing and our people living longer, the number of admissions to mental hospitals is likewise growing. A child born back in 1934 had 1 chance in 20 of spending some time in a psychiatric hospital. Of the children born in 1959, 1 in 10 will need mental hospital care sometime during their lives.

On the positive side, it is also true that hospitalization is shorter and that the proportion of discharges has risen even more rapidly than the admission rates, showing a decrease for each of the past 3 years.

Continued improvement in the care of the mentally ill depends on several factors. Health isn't free. More funds, facilities, and personnel are needed. Full mobilization of these elements through improved administrative procedures and enlightened treatment practices determines the effectiveness of the results. We must continually strive to reduce overcrowding and to find competent personnel. Overcrowding and understaffing are the twin problems which have plagued our Nation's welfare institutions for more than a century. Statistics show that our determination to meet this challenge has created better care and treatment for patients, better conditions for personnel, marked improvement in the general health of the institutional communities, decreases in the average length of hospital stay, increases in the rate and number of hospital discharges, and constant saving to the taxpayer. But with all of this, the task is far from finished.

Studies at State mental hospitals demonstrate that intensive treatment of patients, rather than mere custodial care, effects real dollar savings to the taxpayer and serves a humanitarian purpose as well. When a patient returns to his home, the community saves money. He rejoins society, he works and earns wages; he is a taxpayer, not a tax consumer. This will also show an eventual saving on capital investment.

As a result of the activities of the National Institute of Mental Health our country has made considerable progress in increasing the availability of adequate treatment, in enlarging and improving the supply of trained personnel, and in expanding the research programs designed to solve many of the unanswered questions about mental illnesses. But there must be more research, more training, and more community mental health services if we are to derive full benefit from the advances we have made thus far. Not only are we concerned with the present, we must prepare for future needs.

The President's budget for the fiscal year 1960 specifies \$52,384,000 for the National Institute of Mental Health. This is no more than was appropriated last year. If we are to gain ground against the Nation's No. 1 health problem, we must attack it with more vigor and more money. The National Association for Mental Health recommends the appropriation not of \$52,384,000 but of \$74,000,000, with the projected increase spread throughout the following activities:

	President's budget	Recom- mended by NAMH ¹
ACTIVITIES		
Research projects.....	\$18, 803, 000	\$25, 000, 000
Research fellowships.....	1, 286, 000	2, 000, 000
Training.....	18, 213, 000	26, 000, 000
State control programs.....	4, 000, 000	8, 000, 000
Total grants.....	42, 302, 000	61, 000, 000
UNDER DIRECT OPERATIONS		
Research (including biometrics).....	6, 941, 000	8, 000, 000
Review and approval of grants.....	916, 000	1, 200, 000
Professional and technical assistance.....	1, 669, 000	3, 000, 000
Administration.....	456, 000	700, 000
Total, direct operations.....	² 10, 082, 000	² 13, 000, 000
Total.....	52, 384, 000	74, 000, 000

¹ National Association for Mental Health.
² Includes \$100,000 for "Training activities."

The National Association for Mental Health is striving to achieve, through citizen action, improved care and treatment of the mentally ill and handicapped, improved methods and services in research, prevention, diagnosis, and treatment of mental illnesses and handicaps, and the promotion of mental health.

The National Association for Mental Health and its 43 affiliated State and Territorial mental health associations, 750 local mental health associations, and 1 million volunteers have learned through experience that the modern legislator doesn't need to be told that a vast problem exists. What he really wants are facts and constructive suggestions that will help him to evaluate the requests with which he is besieged.

Although the National Association for Mental Health is itself actively engaged in the financial support of research in mental illness, although many of our associations have a major stake in the support of training activities, we shall leave to representatives of the American Psychiatric Association and other professional bodies the function of discussing the technical aspects of research and training.

However, I wish to point out why our organization considers it urgent that appropriations for research and training be increased. Certainly, you gentlemen are cognizant of the gains which have been made during the past several years in the care and treatment of the mentally ill. We hear daily of the improvement of treatment methods and of the increase in the number of patients who are being discharged from the mental hospitals as a result of these improvements. These gains would never have come about were it not for the research which had been

carried on previously in the refinement and improvement of existing treatment methods, as well as the discovery of new ones. Despite these gains, however, we must recognize that a large proportion of the patients in mental hospitals cannot yet be cured. While science has discovered effective treatment methods for some of the mental illnesses, there are still many types of mental illness for which no effective treatment is yet known. When we speak of mental illness we should actually refer to dozens of distinct and separate diagnosable disorders, each one requiring a tremendous amount of research as to cause, treatment, and prevention. We must recognize also that while considerable gain has been made in the treatment of some of the mental illnesses, hardly any progress at all has been made with regard to the prevention of these mental disorders. It is urgent that a completely new research front be opened for an attack on mental illness aimed directly at the development of methods of prevention.

With regard to the need for actual funds for training, we point to the fact that mental hospitals throughout the country suffer from a severe shortage of trained psychiatric personnel. In some cases this is a reflection of the inadequacy of State funds for the employment of personnel. In many cases, however, it is a reflection of the unavailability of such personnel even where there are funds to employ them. Appropriations alone are not the answer; actually, the necessity for augmenting the supply of trained personnel is a vital element in the overall problem.

I want now to address my remarks to the area of direct service to patients through the State and local mental health programs.

The support of research is essential, but research findings lose their potential effectiveness if the professional staff of a clinic is too overburdened and underpaid to attend professional meetings and to purchase professional journals in which research findings are published.

Training is essential, but training grants alone will not meet the public service needs in mental health. The people who are trained must get to places where they can serve the patients who need them. If salaries are so low that persons trained at public expense feel it financially necessary to enter private practice instead of public service much of the population will be denied helpful and economical outpatient treatment services. We know that of the 3,101 counties in the Nation more than 2,000 do not have even a single psychiatrist. While we recognize that many of these counties are sparsely populated, we must point to the fact that even in those counties which are densely populated there is at least a 50-percent shortage of psychiatrists in terms of the needs of the mental hospitals psychiatric clinics, research centers, rehabilitation services, and other community services. The only resources in some communities (and those most often used) are the family physician, the clergyman, and the county or city welfare workers. Unfortunately, many of these professional people, including the family physicians, are neither trained nor highly motivated for handling mental health problems. Thanks to the foresight and interest of the Congress, the National Institute of Mental Health has been able to bring about a program for the training of the general practitioner in certain mental health concepts and methods. However, as needs continue to grow, this program should be at least doubled.

Without question one of the most important influences in the initiation and development of modern community mental health services—services which use what research is teaching, what trainees are learning—is the program of direct grants to States. These grants have set standards of treatment of the mentally ill and have been the means of creating State programs where none existed before. The committee will recognize that we are dealing here with funds spent for local community work, work with early mental cases who are ambulatory, who are working or in school, not in institutions where they cannot be productive.

These grants to the States under the National Mental Health Act began in 1948 with an appropriation of \$3 million. In the ensuing 10 years, these Federal funds were increased, but only to \$4 million. The States, meanwhile, have greatly increased their appropriations for community health services. In 1948 they spent matching funds to the extent of \$2,500,000. A decade later, in 1958, they spent over \$50 million for community mental health services. Thus while the Federal Government's appropriation of mental health program funds for distribution to the States has increased by a single million, the States themselves have increased their outlay by \$47,500,000. These funds made available to the States have permitted them to conduct demonstrations and hold training programs which ordinarily would not be possible. It is therefore urgent that the States be encouraged to expand their expenditures for community mental health services. This impetus must come from increased Federal grants for State community services.

There is no question that in calling forth State action this program of grants to the States for the promotion of local mental health programs has been one of the most successful ever promulgated.

The States need an increase in these grants. In the smaller States with low populations the basic grant is but \$25,000 a year, far too small an amount to develop sufficient services even as a starter. In these States, these funds have hardly been enough to establish a minimum program. In many larger and more populous States the freedom for new development often afforded through these grants has been used up; consequently, added impetus is needed.

In the smaller States, such an impetus will speed the development of basic mental health services, and enable these States to offer attractive positions to the new people now being trained, to use the research knowledge now being gained. In the larger States the impetus of more Federal aid will allow the expansion of training programs so that the States can better use the State funds allocated for community mental health services.

Regarding State grants research aims frequently have to await the development of basic services; in many States, this development must be accomplished on a pilot basis, not only in laboratories but in each local community clinic. These State grants are the only provision of Federal funds to support actual basic services in a State program.

These opportunities have been earned by the sound use made by the States of Federal funds granted over the past 10 years. They have used these funds well, and they see vistas that can be entered with new stimulation. They should have the opportunity to make another stride ahead.

Since we represent the citizens in their States and cities across the country, it is natural that we should be particularly concerned that the people who are trained and the new knowledge that is gained shall be put to work in our States and our communities. We therefore ask that the 1960 appropriation for State grants-in-aid be double the 1958 figure, that the total in this category of the President's budget for the National Institute of Mental Health be \$8 million—this amount of money to work for the improvement and expansion of community mental health services for the people of our country.

This is a major point in our overall request that the 1960 budget for the National Institute of Mental Health be increased by \$22 million—from the \$52 million requested by the President to \$74 million. This request, which has the full endorsement of the National Association for Mental Health, is made after full and complete analysis of the needs and potentialities of the National Institute of Mental Health and on the basis of consultation with the American Psychiatric Association.

For many years now, I have had an active interest in the mental health problems facing this country. I have closely observed the work of the NIMH. For example I have seen the growth of their research efforts, made possible by congressional appropriations, research grants that have provided support for highly trained investigators in medical schools, universities, hospitals, clinics, and communities, all of whom are conducting basic and applied research aimed at increasing our knowledge about the causes, treatment, and prevention of mental illnesses. They are to be highly commended for distinct progress made in this field, albeit the need for continuing effort and application requiring more trained personnel and increase of available funds is still evident.

The work done by NIMH under the able leadership of Dr. Robert Felix in the training field is worthy of note for the record. This activity continues to provide for consultations and demonstrations to schools and hospitals and for the inservice training program of the Institute. New knowledge, techniques, and methods are constantly being developed and as time goes forward, and needs increase (in spite of the tremendous progress which has been made) continued support of the NIMH programs and objectives should be wholeheartedly endorsed and supported.

In closing I should like once again to mention the great importance of doubling the President's proposed amount which has been budgeted for grants to the States under title 5. I have a personal interest here, that is to say I am deeply interested in having our program in Alabama grow at a steady pace. The \$60,000 additional which would come to our State department of health (division of mental hygiene) would assure that result.

GENERAL STATEMENT

Mr. JOHNSTON. I do not think it would be appropriate for me to elaborate on the statement at this time. Moreover, I think perhaps it would be presumptuous of me to speak to this committee in cate-

gorical terms about the necessity for research in the field of mental health.

Senator HILL. May I say that I know, of my own knowledge, how much time and thought and study you have given this problem, and how much knowledge you have gained through your work and through your personal observations, so you are very well qualified here, because of your deep interest and the work you have done and the experience you have had and the opportunities you have had for observation, and from what you have seen in the field and from what you know exists in the field of mental health.

Mr. JOHNSTON. I appreciate your saying that, Mr. Chairman. I have spent quite a few hours in the last 4 or 5 years in connection with this subject. It has been a most meaningful experience. There is not a single witness who has preceded me at this table who has not paid the deepest respect and admiration to this committee for its outstanding foresight and wisdom in appropriating public funds for medical and scientific research in the fields of medicine and the behavioral sciences, and I want the committee to know we certainly share in that feeling in the National Association for Mental Health, and I, along with thousands of my fellow men, are intensely proud of the work that Senator Hill has done in this entire endeavor.

EVALUATION OF 1960 BUDGET

Now, however, the report of the House committee clearly demonstrates, with respect to research, the executive budget is not a forward-looking budget, but an aggressive-looking one, in the sense that it does not permit the expenditure necessary to maintain the same level as we have had during the current fiscal year.

From the economic survey which was recently promulgated by the Commission on Mental Health, we are keenly aware of the terrific cost to the American people of mental health. I think the figures are somewhere in the neighborhood of \$3 billion in annual costs. This figure excludes certain indirect costs, and if those are taken into consideration we really run into some very incredible figures with respect to the cost of this situation.

In any event, we do not believe that the decision to pare down the budget for research below the level which has been recommended by the experts in the field of medicine in this country would be a proper one with the American people, that is, those who are oriented on the subject and are familiar with the massive costs of this situation.

VOLUNTEER WORK IN MENTAL HEALTH

Now in that connection I think I can speak with some assurance, that we are representative of quite a few people in the country who are volunteers in the business. Our association is composed of about 45 State organizations, State associations, and affiliated with those are some 750 mental health associations throughout the United States.

It has been estimated by somebody on our staff during the course of a particular year, at least one million people volunteer some form of activity in the general area of mental health, purely on a voluntary basis.

These are the people who are generally familiar with the problem. They read the literature and they see the hospitals in operation and they are familiar with the local situation in their communities and I think that any pennywise and pound-foolish attitude with respect to the budget would be regarded with concern by those people who not only anticipate everything that reasonably can be done from the national level should be done but also those services which have been maintained through the National Institute of Mental Health should be continued.

INCREASE IN NEED

The House committee's report does not take into consideration the factor of a 25-percent increase, taking into account the indirect costs, and that is the kind of question I am not too familiar with, but I have been informed it has been increasingly difficult to let contracts for research unless this factor is taken into account; so the total amount of research which has been made available, from the information we have received—and we have had some little limited experience from our own research setup in connection with the Association—which is a material factor which will facilitate the award of contracts for research services.

INCREASE FOR PERSONNEL NEEDED

We have also recommended the increase of \$8 million concerning personnel. Dr. Braceland went through that in some detail. I want to state this: That we certainly feel there is a severe shortage of trained personnel in practically every mental hospital in the United States, and that this reflects, in some cases, the lack of appropriations for the employment of that type of personnel, but in many cases it reflects the lack of availability.

There is also a drastic shortage of personnel who are competent to staff research and teaching and administrative positions. It is our understanding that the program of the National Institute of Mental Health is directed toward not only the recent number of professional workers, the psychiatrists, psychologists, social workers, nurses, and those types of technical personnel, but they also have a program of educating and indoctrinating and orienting those elements of professionals who are less directly connected with mental health. I refer to the ministers, and in some cases, the lawyers, and particularly schoolteachers.

SEMINARS FOR TEACHERS

I might say at this point we have had a very interesting experience in Alabama through the Alabama Association of Mental Health and the Department of Mental Hygiene of the State Department of Health.

We have run seminars for teachers each summer at the Teachers College. We had one last year. Those are attended by about 60 teachers who are recommended by the principals of their schools throughout the State, in that they have oversubscribed to the point of 4 or 5 to 1. In other words, only those personnel who display the qualifications which their superintendents think would make them get more out of this program are the ones who are eligible to attend the seminars.

We have planned to have three this year, but because of the fact that the funds from the Department of Social Hygiene are depleted, it is questionable whether or not we will be able to go forward with the seminar or the workshop.

GRANTS-IN-AID PROGRAM

Finally, if I could make this statement with respect to the grants-in-aid programs to the States, the most significant aspects of this whole program of the National Institute, as I recall it, the direct grants first came into the act in 1946—mental health, in 1946.

The purpose was to encourage the States to go forward on their mental health programs, exclusive of the mental hospitals and inpatient treatment.

The funds, I believe, are allocated on the basis of population per capita income, and perhaps the needs which are taken into consideration.

That appropriation has been at least at a level of \$3 million or \$4 million. I think there are some good reasons why that should be continued.

In the first place, the purchasing power of that appropriation is going to decline substantially in the ensuing years. There are a number of projects which have been inaugurated by the States which need strengthening because of new knowledge, new procedures, and new techniques which have developed in these past years. The costs of those projects, just like hospital costs in general, have skyrocketed so it is necessary to keep the appropriation up to maintain the same influence from that type of appropriation. We think it should be at least doubled now.

VALUE OF GRANTS-IN-AID PROGRAM

I believe Dr. Braceland, when he testified before the House committee, said he believed that program could use \$12 million, and that would not be too much.

Furthermore, this is the only direct aid program to the States. There are no particular strings attached to these appropriations. They are flexible.

For instance, the executive department in Alabama tells me it is a great stimulus to activity and to developing new procedures, which are translated into new knowledge. They say we not only learn from what transpires in research laboratories but in the practical operation of each field unit, and I refer to rehabilitation projects and that sort of thing there.

Finally, I think one of the most influential factors is what you brought out in connection with Dr. Ravdin's testimony, about the fact that your grants to research facilities have stimulated—on a 1-to-1 bases originally, they have actually stimulated a 4-to-1 basis.

That is the same sort of stimulation that is taking place in this State program.

STATE CONTRIBUTIONS

As I recall the act, one State dollar will produce two Federal dollars, and if you take that as a minimum, you would have \$4 million of Federal funds to \$2 million in State funds; but actually, during 1959,

fiscal year 1959, we find, from Dr. Felix, that a total of \$54 million was put up by the States.

Now, of course, in the course of time the States would normally spend more money on mental health. But I think they all feel this impact of this State-controlled program has been a very significant factor in that picture. We would certainly concur.

REQUEST FOR INCREASED FEDERAL AID

We would merely like to make our recommendation that this program be doubled.

Senator HILL. The Federal part of the program was a challenge.

Mr. JOHNSTON. It is a tremendous challenge, but not only that, the Federal money has gone into a particular community and stimulated State money. Before you know it, that community gets interested in the community chest or the United Givers Fund and other voluntary subscriptions and the activity is taken over by the community on a local basis and then the Federal funds are made available to stimulate another project in another locality.

Really, it is good government. It is decentralization of the projects and it is encouragement and recognition of the local responsibilities of these States. Certainly, it has been a privilege to talk before this committee, and I want to say again how much we appreciate what has been done in mental health, and this committee really occupies a high position in our minds in that improvement in mental health.

Senator HILL. Senator Smith.

SENATE LEADERSHIP

Senator SMITH. I am sure that you and all of the people that have been before this committee well understand the leadership we have had in this line—medical research—by your own Senator Hill, the chairman of this committee. Many of us have been privileged to follow Senator Hill's lead and I am happy to have been associated with him; but don't forget, Senator Hill, the chairman of this committee, is the pioneer in medical research.

Senator HILL. I am forbidden by Senator Smith to answer back, but I will call attention to the statement I made on the floor of the U.S. Senate last week when we had under debate the bill for international medical research.

The gentlelady from the State of Maine, the Senator from Maine, was not even on the floor, but I sought to call attention to the wonderful part she had played in the cause of medical research, and how any contributions that this committee of the Congress may have made have been due to the fact that we have had a team—we have had a team with no politics and no political lines, and there has been no more devoted or dedicated or brilliant member of that team than the Senator from Maine.

And I want to say this, that our good friend here sitting on my right, from Oklahoma, also has been one of the most active and finest and best members of that team.

I want to say this to you, Mr. Johnston, that by coming here today, by your presence here today, even with your busy work at home, in bringing us this splendid and most helpful statement, you have brought to us, both you and Dr. Braceland have brought to us, an

inspiration—an inspiration to this team—and we are deeply grateful to both of you.

Tomorrow morning we will meet at 10 o'clock and will have Dr. Michael De Bakey, professor of surgery, Baylor University, one of the great heart surgeons of the world; and Dr. Frederick J. Stare, of the Harvard School of Public Health.

He will be talking about the heart, in addition to the particular terms of nutrition, because he is the head of the nutrition department at Harvard.

Then after that, we will have the subject of arthritis from Dr. Walter Bauer, of Massachusetts General Hospital, Boston; and Dr. William J. Darby, professor of biochemistry, Vanderbilt University; and then we will take up the question of allergies, which will be presented by Dr. David C. Crockett, Massachusetts General Hospital, of Boston; Dr. W. Barry Wood, Jr., from Johns Hopkins University School of Medicine and Dr. Harry L. Alexander, Washington University Medical School.

The committee will now stand in recess until 10 a.m.

(Whereupon, at 12:40 p.m., Wednesday, May 27, 1959, the committee recessed until 10 a.m., Thursday, May 28, 1959.)

DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR 1960

THURSDAY, MAY 28, 1959

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room 1318, New Senate Office Building, Hon. Lister Hill, chairman of the subcommittee, presiding.

Present: Senators Hill and Smith.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

NATIONAL HEART INSTITUTE

STATEMENTS OF DR. FREDERICK J. STARE, PROFESSOR AND
CHAIRMAN OF THE DEPARTMENT OF NUTRITION, HARVARD
UNIVERSITY SCHOOL OF PUBLIC HEALTH, BOSTON, MASS.;
AND DR. MICHAEL De BAKEY, PROFESSOR OF SURGERY, BAYLOR
UNIVERSITY, COLLEGE OF MEDICINE, HOUSTON, TEX.

PREPARED STATEMENT

Senator HILL. The committee will kindly come to order.

All right, Dr. Stare, we will be delighted to have you proceed first. You are professor and chairman of the department of nutrition, Harvard University School of Public Health, Boston, Mass.

Your statement will be placed in the record in full and you may proceed as you wish.

(The statement referred to follows:)

Gentlemen, this is the second year I have had the privilege of appearing before you as a private citizen—a taxpayer—requesting more funds for health and medical research, specifically for the National Heart Institute.

In round numbers the fiscal 1959 appropriations for the National Heart Institute were \$45,500,000. You will remember that this was an appreciable increase over what the administration requested, and yet it was woefully inadequate. It did not provide for full reimbursement for the indirect expenses of research grants so that we continue to bleed our universities and hospitals of sorely needed educational and endowment funds. It did not even provide enough funds to pay many good, approved research requests. It did not provide funds sufficient to help train all the good young men and women who wanted and merited training.

For next year—that is, fiscal 1960—the administration is requesting essentially the same sum as was appropriated this year and found to be inadequate. The

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citizens' request, which I fully support, is for a sum of \$89,500,000. The proposed budget is as follows:

	1960 President's budget	Increase for normal growth and develop- ment	Total
Grants:			
Research projects.....	\$24,643,000	\$10,857,000	\$35,500,000
Research fellowships.....	2,163,000	500,000	2,663,000
Training.....	7,152,000	2,000,000	9,152,000
State control programs.....	2,125,000	2,000,000	4,125,000
Direct operations:			
Research.....	7,266,000	770,000	8,036,000
Review and approval.....	790,000	300,000	1,090,000
Training activities.....	154,000	46,000	200,000
Professional and technical assistance.....	1,101,000	1,399,000	2,500,000
Administration.....	200,000	34,000	234,000
Total obligations.....	45,594,000	17,906,000	63,500,000
Special allocations:			
Primate colony.....			11,000,000
Centers of C-V research.....			15,000,000
Total.....			89,500,000

I wish to call particular attention to two new items in the proposed budget: Special allocations to develop primate colonies and to develop a few new centers for cardiovascular research.

Primates have not been used much so far in cardiovascular researches. Our laboratory has been a leader in their use. It is difficult to get monkeys for experimental studies. There are many types of monkeys. Chimpanzees, which are far more intelligent than monkeys, have not been used at all. They are most difficult to obtain and most expensive. Baboons are just beginning to be used. We recently found a species of monkey in Colombia, South America, the woolly monkey, which in nature develops lesions of arteriosclerosis. It is the only monkey we have found that shows much obesity. Perhaps here we have a primate suitable for both arteriosclerosis and obesity studies and in which the obesity may be an added hazard to the arteriosclerosis as it is in man.

Last June we submitted a request to the National Heart Institute to enable us to try to develop a primate colony in Colombia, South America, especially to develop this lead with the woolly monkeys. The request was recommended by the study section last fall and by the National Advisory Heart Council last November. We were notified last December 15 that there were insufficient funds to pay the grant. The grant is still unpaid, and hence the opportunity to investigate this interesting primate lies waiting because of insufficient funds.

Less than 2 months ago I spent some time in the Belgian Congo, in part to look into the possibilities of establishing a "Chimp colony." In such an endeavor, I have a feeling that the Belgian Government would be a willing partner; and in my opinion, a ready source of chimps at a reasonable price would be a great asset, not only to cardiovascular research, but to many other types of health and medical research.

One might ask: Why work with primates in the first place? The reasons are many: You and I are primates; we are not rats, dogs, or mice. Conceivably researches done with primates might have more relevance to you and me. Many primates have diets in their natural habitat similar to man: Meat and eggs from catching birds and robbing nests, fruits and grains, but much less fat—and from what little we know, atherosclerosis; heart disease and strokes are rare among our primate friends who live in the forests. Lastly, primates have proven useful in studies of certain infectious diseases, for example, poliomyelitis. The development of "primate farms" by the National Heart Institute would certainly soon make these animals available for many other types of health and medical researches.

We should establish in a few places centers of cardiovascular research—places that have demonstrated their interest and abilities. For example, at the Cleveland Clinic with Drs. Page and Corcoran; in Chicago with Dr. Louis Katz; in New York with Dr. Irving Wright; and there are others, places that attract graduate students, postdoctoral fellows, and domestic and foreign scientific colleagues. Such places could well use \$500,000 to \$1 million each, per year, in

intelligent pursuit of the mysteries of our most common cause of death—cardio-vascular disease.

These centers should be of different types. Some might stress basic experimental studies, others clinical, epidemiologic, and community researches; and in some we might have a balance of researches among the various disciplines used in attacking by far our main cause of death—the diseases associated with arteriosclerosis.

In recent months, and currently, we hear frequent comments about a “balanced budget,” and I should like to put forth the idea that one of the best ways to balance the budget is to spend more money on health and medical research so as to have more people in better health to make more money and pay more taxes.

Retrenchment on health is no way to increase productivity upon which a growing economy depends. The National Health Education Committee estimates that people saved from death between 1944 and 1957, as a result of research which caused the decline in death rate during this 12-year period, earned over \$3 billion in income in the single year of 1957. These people in 1957 paid to the Federal Treasury in income, estate, gift, and excise tax revenue over \$600 million. In fiscal 1959 the Public Health Service will spend \$216 million in medical research. Thus the funds spent in fiscal 1959 by the Public Health Service for research were paid to the Federal Government almost three times over, back in 1957 when incomes were lower than they are today.

Thus from the mercenary viewpoint of dollars, health research is good business—to say nothing of the humanitarian view of longer, fuller, and happier lives. I was distressed to read the comments of Senator Dirksen, as reported in the New York Times last week, when the bill relating to international health and medical research was debated. He apparently doesn't realize that healthy people, living people, are needed to pay taxes. I wonder what kind of dollar value the Senator would place on those that are living today because of the 6-year increase in life expectancy that has taken place in the last 15 years, and what about the dollar value on those who are not with us any more but might have been if we had made greater strides in health and medical research, as we surely will?

May I emphasize that skimping on health and research funds is not the way to balance the budget. The long-term effect will be the opposite. More research funds contribute to improved health, more productivity, more earning power, and more taxes.

Cardiovascular diseases continue to be our main cause of death, responsible for two-thirds of the deaths in this country. Coronary heart disease and cerebral hemorrhages or strokes are the principal diseases, but there are many others. We are not appropriating enough funds to do the best job we can with our available professional people, and we should be training more people.

One could well give added emphasis to the tragedy of strokes. Strokes frequently do not kill. Rather, they leave an individual to linger in death for weeks, months, or years, a helpless individual, a serious economic drain. Many of our mental and VA hospitals have stroke patients. But strokes do kill, and in 1957 they killed approximately 188,000 people.

Briefly I should like to state what I consider the key changes that should be made in the expansion of our public health research activities, specifically the National Institutes of Health and the National Heart Institute to which I have directed most of my comments:

1. Full indirect costs of the research supported should be paid to the institution in accordance with Budget Bureau Circular A-21. We are all too rapidly bleeding our universities and hospitals of cash they sorely need to keep their heads above water. Without them we would be nowhere in research. We are killing the goose that makes the golden eggs possible.

2. Training funds need to be expanded. Men and women trained in research, all types of research, are our greatest assets. Currently, and for the near future, this particularly applies to pharmacologists, physiologists, and biochemists to participate in the testing in both animals and man, of the large number of compounds being developed in the industrial cooperative programs sponsored by the Cancer and Heart Institutes. Examples of such drugs in the heart field would be oral heparin and cholesterol-lowering substances.

3. The development of a few centers of research in various aspects of cardiovascular disease to give stability to leaders and laboratories that have demonstrated their ability to do an outstanding job.

4. Institutional research grants to lend stability to broad, basic university programs and to permit them more quickly and independently to follow up new leads as they develop in their laboratories. Remember, the universities are the

wellspring of our future talent. Without strong, independent, and individually distinct universities, we will soon be bankrupt of new ideas, new brains, and fresh enthusiasm.

5. Funds are needed that are specifically earmarked to develop the use of primates, such as monkeys and chimpanzees, in health and medical researches. Such "primate farms" should be of different types, in a number of different countries and different regions of this country, as no one knows now just what is the best type of primate farm.

6. More funds are needed to support the substantial backlog of good research projects that have been approved, but not paid, because what some considered large appropriations last year were not large enough to pay these requests. Let me emphasize these are not second-rate projects. Such projects are not even approved by the study sections. The point is, more people with more research ideas approved by study sections of colleagues have requested more money than is currently available.

Let's make more money available. For the National Heart Institute we are requesting \$89,500,000. Let's remember that it's pretty shortsighted policy to balance the budget by decreasing funds for health and medical research. Our Nation's strength requires more productivity and expanding economy, more people paying more taxes, and that requires good health.

RESEARCH IN BELGIAN CONGO

Dr. STARE. Thank you.

Senator HILL. I believe you have just returned from a trip overseas; is that right?

Dr. STARE. Yes, I was in the Belgian Congo about 6 weeks ago, our colony in Colombia, where we have some cooperative research on cardiovascular disease underway with monkeys.

This is the second year, as you know, Senator Hill, I have had the privilege of appearing before you as a private citizen, as a leader of an active research group of some 60 or 70 people in the department of nutrition at Harvard University, working primarily on problems associated with cardiovascular disease, of which one of the more important ones is the question of overweight or obesity.

OVERWEIGHT AND CARDIOVASCULAR DISEASE

Not only is overweight an increased hazard to people with cardiovascular diseases but I am sure Dr. De Bakey will tell you it is an increased hazard to practically all types of surgical operations.

Also, I should like to point out, I am a taxpayer and, as a taxpayer, I am interested in paying more taxes to have more funds in health and medical research.

ADDED FUNDS FOR NATIONAL HEART INSTITUTE

Now I am testifying primarily in behalf of the National Heart Institute. In round numbers the fiscal 1959 appropriations for the National Heart Institute were \$45,500,000. You will remember, I am sure, that this was an appreciable increase over what the administration requested and yet it turned out to be woefully inadequate.

The current appropriation, which some people thought was awfully large, did not provide for full reimbursement for the indirect expenses of research grants in these universities and hospitals, so that we continue to bleed our universities and hospitals of sorely needed educational and endowment funds.

The appropriation for this year did not even provide enough funds to pay many good, approved, research requests. It did not pro-

vide funds sufficient to help train all the good young men and women who wanted and merited training.

For next year, that is, fiscal 1960, the administration is requesting essentially the same sum as was appropriated this year and found to be inadequate. The citizens' request, which I fully support, is for a sum of \$89.5 million.

Now the proposed budget I do not intend to go into in detail because it does appear in my statement. However, I would like to call attention to a few of the specific items of increase that I think are of particular importance.

Senator HILL. The House provided an appropriation of \$52,574,000 and the budget, as you say, was \$45,594,000 and you have urged we raise that to \$89,500,000?

Dr. STARE. Yes, Mr. Chairman, approximately doubled. I wish to call particular attention to two new items in the proposed budget:

COLONIES FOR PRIMATE RESEARCH

First, a special allocation of \$11 million to develop primate colonies, so as to have these interesting animals available for research, and, second, an appropriation of \$15 million to develop a few new centers for cardiovascular research.

Now primates have not been used much thus far in cardiovascular research.

Senator HILL. I think both Senator Smith and I would be interested in further discussion of the term "primates."

Dr. STARE. It simply describes a family of animals, of which man is one; others are monkeys, chimpanzees, apes, baboons, and so forth. I think if we can do more research with primates, as contrasted with rats and mice and dogs and cats, the chances are that these findings in primates will have more direct application to you and me. I think I should refer to our laboratory at Harvard.

Senator HILL. In other words, you think their metabolism, their chemical makeup, their body makeup, is more nearly akin to ours than some of these others we have been using, is that right?

Dr. STARE. Yes. For example, take the chimpanzee. He has the most highly developed brain outside of man and I am sure that neurologists in many parts of the world would be delighted to have available chimpanzees to work with, because they would be working with an experimental animal with a brain that is reasonably intelligent, and is the closest approach to man.

I think our laboratory at Harvard has been one of the leaders in the use of primates in cardiovascular research.

DIFFICULTY OF OBTAINING MONKEYS

Now it is difficult to get monkeys, which are primates, for experimental studies. There are many types of monkeys. As I have mentioned, the chimpanzees, which are far more intelligent than monkeys, have not been used at all in cardiovascular research. They are most difficult to obtain and most expensive. Today, if you wanted to get a chimpanzee you would probably pay in the range of \$800 to \$1,000. Whether or not you would get one, there would still be a period of waiting anywhere from 1 to 6 months. If you wanted to get a half a dozen, you would really be in a pickle.

Senator HILL. Well, that is because he must have some intimation of what you want to use him for.

Dr. STARE. Well, I doubt that, Senator, but the chimpanzee's native home is in Africa, and one of the reasons I was in the Belgian Congo 6 weeks to 2 months ago was to see if I could help facilitate the obtaining of chimpanzees for some of our experimental studies.

TYPE OF MONKEY DEVELOPING OBESITY

Workers are just beginning to use baboons for cardiovascular research.

A little over a year ago we found a species of monkey in Colombia, South America, the woolly monkey, which in nature develops lesions of arteriosclerosis. It is the only monkey we have found that shows much obesity or overweight. Perhaps here we have a primate suitable for both arteriosclerosis and obesity studies and in which the obesity may be an added hazard to the arteriosclerosis, as it is in man.

Last June we submitted a request to the National Heart Institute to enable us to try to develop a primate colony in Colombia, South America, especially to develop this lead with the woolly monkeys. The request was recommended by the study section last fall and by the National Advisory Heart Council last November. We were notified last December 15 that the request had been approved but that there were insufficient funds to pay this grant. The grant is still unpaid, and hence the opportunity to investigate this interesting primate lies waiting because of insufficient funds, from an appropriation which many people consider entirely too large. I cite this as one specific example of a study dealing with primates and no money to pay for it.

Senator HILL. Doctor, do you recall the figure offhand of the amount of money involved in this grant? If not, we can get it.

Dr. STARE. It is approximately \$35,000.

ATTITUDE OF BELGIAN GOVERNMENT

Less than 2 months ago I spent some time in the Belgian Congo, in part to look into the possibilities of establishing a "chimp colony." As a result of my trip there, I have a feeling that the Belgian Government would be a willing partner to our Government, and, in my opinion, a ready source of chimps at a reasonable price would be a great asset, not only to cardiovascular research but to many other types of health and medical research.

VALUE OF WORK WITH PRIMATES

One might ask: "Why work with primates in the first place?" The reasons are many: you and I are primates; we are not rats, dogs, or mice.

Conceivably researches done with primates might have more relevance to you and me. Many primates have diets in their natural habitats similar to man: meat and eggs from catching birds and robbing nests, fruits and grains, but much less fat—and from what little we know, much less atherosclerosis. Heart disease and strokes are rare among our primate friends who live in the forest. Lastly,

primates have proven useful in studies of certain infectious diseases, for example, poliomyelitis.

PRIMATE FARMS

The development of "primate farms" by the National Heart Institute would certainly soon make these animals available for many other types of health and medical researches, as well.

We should establish in a few places, centers of cardiovascular research, places that have demonstrated their interest and abilities; for example, at the Cleveland clinic with Drs. Page and Corcoran; in Chicago with Dr. Louis Katz; in New York with Dr. Irving Wright; and there are others, places that attract graduate students, post-doctoral fellows, and domestic and foreign scientific colleagues.

Such places could well use \$500,000 to \$1 million each, per year, in intelligent pursuit of the mysteries of our most common cause of death—cardiovascular disease.

These centers should be of different types. Some might stress basic experimental studies, others clinical, epidemiologic, and community researches, and in some we might have a balance of researches among the various disciplines used in attacking by far our main cause of death, the diseases associated with arteriosclerosis.

HEALTH EXPENDITURE AND BUDGETING

In recent months, and currently, we hear frequently comments about a "balanced budget." I should like to put forth the idea that one of the best ways to balance the budget is to spend more money on health and medical research so as to have more people in better health to make more money and pay more taxes.

Retrenchment on health is no way to increase productivity upon which a growing economy depends. The National Health Education Committee estimates that people saved from death between 1944 and 1957, as a result of research which caused the decline in death rate during this 12-year period, earned over \$3 billion in income in the single year of 1957.

Senator HILL. Excuse me. At that point will you name for the record the chairman of the National Health Education Committee?

NATIONAL HEALTH EDUCATION COMMITTEE

Dr. STARE. Mrs. Albert D. Lasker is the chairman of the National Health Education Committee. Other members of the committee include Dr. Farber, Dr. Rusk, and Mrs. Anna Rosenberg. I also happen to be a member of the committee.

These people in 1957 paid to the Federal Treasury in income, State, gift and excise tax revenue over \$600 million.

In fiscal 1959 the Public Health Service will spend \$216 million in medical research. Thus, the funds spent in fiscal 1959 by the Public Health Service for research were repaid to the Federal Government almost three times over, back in 1957, when incomes were lower than they are today.

Thus, from the mercenary viewpoint of dollars, health research is good business, to say nothing of the humanitarian view of longer, fuller, and happier lives.

DOLLAR VALUE OF HEALTH

I was distressed to read the comments of Senator Dirksen, as reported in the New York Times last week, when the bill relating to international health and medical research was debated. He apparently does not realize that healthy people, living people, are needed to pay taxes. I wonder what kind of dollar value the Senator would place on those that are living today because of the 6-year increase in life expectancy that has taken place in the last 15 years, the approximate period during which the Government has become more interested in supporting health and medical research?

And what about the dollar value on those who are not with us any more, but might have been if we had made greater strides in health and medical research, as we surely will?

DAILY DEATHS POINT UP NEEDS

I thought it might be of interest to take a quick look at the obituary notices in today's New York Times. You can do this any day of the week.

Here, in the Times, we have who died, how he had died, and what was the age at which he died.

The first gentleman here is Monsignor McNulty, educator, president of Seton Hall.

What did he die of? He died at Good Samaritan Hospital where he was taken last night after having suffered a heart attack.

What was his age? Sixty years.

Joe Kelly, heard with "Quiz Kids", questioner for 16 years on radio show died Tuesday in a hospital of heart disease.

What was his age? Fifty-eight years.

Thomas A. Teta, a typesetter, night linotype operator for the New York Times, died early Tuesday of a heart attack in the composing room.

He was 47 years of age.

Here is someone who shared the 1933 high altitude record, someone from the Marine Corps, a Mr. Fordney, who died of a cerebral hemorrhage in Bethesda, 66 years of age.

Well, I have summarized these deaths published in today's New York Times and here are four people dying of heart attacks yesterday. Their ages are 60, 58, 66, and 47.

There are three people reported as dying of cerebral hemorrhages. What are their ages? Sixty-six, sixty five, and forty-nine.

I wonder what kind of a dollar value Senator Dirksen would place on those people? How much of a dollar value would anybody place on the late Secretary Quarles and what about the great statesman who was laid to rest only yesterday?

Now, may I emphasize that skimping on health and research funds is not the way to balance the budget. The long-term effect will be the opposite. More research funds contribute to improved health, more productivity, more earning power, and more taxes.

MORTALITY RATE FOR CARDIOVASCULAR DISEASE

Cardiovascular diseases continue to be our main cause of death, responsible for two-thirds of the deaths in this country.

Coronary heart disease and cerebral hemorrhages, or strokes, are the principal diseases, but there are many others.

We are not appropriating enough funds to do the best job we can with our available professional people, and we should be training more people.

TRAGEDY OF STROKES

One could well give added emphasis to the tragedy of "strokes."

"Strokes" frequently do not "kill." Rather, they leave an individual to linger in death for weeks, months, or years, a helpless individual, a serious economic drain.

Many of our mental and VA hospitals have "stroke patients."

But, strokes do kill, and in 1957 they killed approximately 188,000 people.

KEY CHANGES FOR PUBLIC HEALTH RESEARCH

Briefly, I should like to state what I consider the key changes that should be made in the expansion of our Public Health research activities, specifically the National Institutes of Health and the National Heart Institute, to which I have directed most of my comments:

1. Full indirect costs of the research supported should be paid to the institution in accordance with Budget Bureau Circular A-21. I think this is probably a better procedure to use than arbitrarily trying to increase these indirect costs from 15 to 25 percent.

We are all too rapidly bleeding our universities and hospitals of cash they sorely need to keep their heads above water. Without them we would be nowhere in research. We are killing the goose that makes the golden eggs possible.

2. Training funds need to be expanded. Men and women trained in research, all types of research, are our greatest assets. Currently and for the near future, this particularly applies to pharmacologists, physiologists, and biochemists, to participate in the testing in both animals and man, of the large number of compounds being developed in the industrial cooperative program sponsored by the Cancer and Heart Institutes.

Examples of such drugs in the heart field would be oral heparin and cholesterol-lowering substances.

3. The development of a few centers of research in various aspects of cardiovascular disease to give stability to leaders and laboratories that have demonstrated their ability to do an outstanding job.

4. Institutional research grants to lend stability to broad, basic university programs, and to permit them more quickly and independently to follow up new leads as they develop in laboratories.

Remember, the universities are the wellspring of our future talent. Without strong, independent, and individually distinct universities, we will soon be bankrupt of new ideas, new brains, and fresh enthusiasm.

5. Funds are needed that are specifically earmarked to develop the use of primates, such as monkeys and chimpanzees, in health and medical researches. Such "primate farms" should be of different types, in a number of different countries, and different regions of this country, as no one knows now just what is the best type of primate farm.

6. More funds are needed to support the substantial backlog of good research projects that have been approved, but not paid, because

what some considered large appropriations last year were not large enough to pay these requests.

Let me emphasize, these are not second-rate projects. Such second-rate projects are not even approved by the study sections.

The point is, more people with more research ideas approved by study sections of colleagues have requested more money than is currently available.

MORE FUNDS NEEDED

Let's make more money available. For the National Heart Institute, we are requesting \$89,500,000. Let's remember that it is pretty shortsighted policy to balance the budget by decreasing funds for health and medical research. Our Nation's strength requires more productivity and expanding economy, more people paying more taxes, and that requires good health.

Thank you.

INTERNATIONAL MEDICAL RESEARCH BILL

Senator HILL. Doctor, you spoke of an international medical research bill. I might say that when that bill was under debate, under consideration in the House of Representatives, I used quotations from your very fine statement that you had made before the Senate Committee on Labor and Public Welfare in behalf of that bill, and I think the use of those quotations was very effective. You made a very fine statement, just as you did this morning, and we appreciate it very much.

Dr. STARE. Thank you, Senator Hill.

Senator HILL. Now, Dr. De Bakey, we would be delighted to hear from you.

Dr. De Bakey is professor of surgery at Baylor University College of Medicine, Houston, Tex.

Dr. DE BAKEY. I have a prepared statement which I will read from, from time to time, with your approval.

Senator HILL. Well, your statement will appear in full in the record, and you may proceed then in any way you see fit, Doctor.

(The statement referred to follows:)

STATEMENT OF MICHAEL E. DE BAKEY, M.D.

My name is Dr. Michael E. De Bakey. I am professor of surgery and chair man of the Department of Surgery at Baylor University College of Medicine. As a teacher of surgery and a practicing surgeon with a special and long-standing interest in cardiovascular disease, both clinical and investigative, and through my association with advisory groups to national agencies concerned with these problems, I have some familiarity with the research and educational programs in this field of endeavor and am cognizant of their needs. On this basis I should like to make the following statement in support of an increase in funds for the National Heart Institute in the amount proposed in the so-called citizens' budget (as attached).

In support of this proposed budget there are certain considerations that deserve emphasis. First among these is the need to maintain and further strengthen the programs of research and training which have brought about so much progress in the attack upon diseases of the heart and blood vessels. In his statement to the subcommittee of the Committee on Appropriations of the House of Representatives, which is available to you, Dr. Irving S. Wright presented some of the exciting new developments, particularly in relation to the problem of atherosclerosis, derived from these research endeavors.

In amplification of these remarks I believe you will be interested in the impressive progress that has been made during the past few years in the surgical treatment of atherosclerosis. Owing to its predilection to involve and block such vital arteries as the aorta and those that supply blood to the brain and heart, this disease is by far the most common cause of death and disability. In recent years through intensive research and clinical investigations, supported largely by funds obtained from the National Heart Institute, an important concept of the disease has evolved which has led to the development of highly effective methods of surgical treatment. This concept is based upon the demonstration that in many of its forms the atherosclerotic lesion is well localized and segmental in nature with relatively normal arteries proximal and distal to the diseased vessel. This tendency of the atherosclerotic process to assume a pattern of segmental involvement may be recognized even in the presence of fairly extensive arteriosclerotic disease in different parts of the body. Depending upon their location in the arterial channels, these lesions may produce serious and even lethal manifestations. Thus, the occurrence of these localized atherosclerotic occlusive lesions in the terminal aorta and its main branches supplying blood to the lower extremities ultimately causes sufficient decrease in circulation to produce gangrene. Severe hypertension or high blood pressure, with all of its dire consequences, may also be produced by these lesions when, for example, they involve the main arteries to the kidneys. Similar involvement of the coronary arteries is, of course, the most common cause of heart attacks.

Until recently, the various methods of therapy for these conditions were essentially palliative in nature and far from satisfactory. In recent years, however, and on the basis of knowledge gained from investigative studies, precise diagnostic as well as effective therapeutic methods have been developed. Thus, by means of arteriography consisting of injection into the arteries of a radiopaque substance, it is possible to visualize the precise location and extent of the occlusive lesion. Depending upon these findings, several methods of surgical treatment may be employed, consisting in removal of the occlusive lesion or its replacement with a substitute artery to restore normal circulation. Within the past few years sufficient experience with these methods of treatment has accumulated to establish their efficacy. Indeed, in a recent analysis of our own experience with more than 1,000 cases of this type in which these methods of surgical treatment were employed, successful results were obtained in approximately 94 percent. Thus, a high proportion of patients who formerly would have died or would have been seriously disabled from gangrene of the lower extremities, strokes, and high blood pressure due to arteriosclerosis involving the arteries to the kidneys may now be completely relieved.

Still another example of their serious nature is illustrated by the occurrence of strokes resulting from involvement of the carotid and vertebral arteries which supply blood to the brain. This is one of the more recent and exciting developments in this field of endeavor. Formerly it was believed that strokes were due to hemorrhage or thrombosis of arteries supplying the brain within the skull. During the past few years and as a result of intensive research efforts it has been found that in a high proportion of patients these intracranial arteries may be normal and the actual block causing the stroke lies in the more proximal extracranial part of the arteries in the neck or chest. The great significance of this new knowledge lies in the fact that the occlusive lesion in these vessels may be effectively treated by surgical means with restoration of normal circulation to the brain. Sufficient experience with this method of therapy has now accumulated to establish its efficacy. In our own experience with more than 150 cases, successful restoration of normal circulation was obtained in over 95 percent. Although this has been a most gratifying development, there is urgent need for more intensive research in this field in order to permit wider and more effective application of this new knowledge. In this connection you will be pleased to know that the National Heart Institute has recently established a well-coordinated collaborative research program to strengthen and intensify studies in this direction.

The second consideration that I wish to emphasize in support of this proposed budget is concerned with the establishment of a primate colony for cardiovascular research. This matter has been brought to the attention of this committee previously, and the report of a special committee of the National Heart Institute which has been concerned with this subject has been submitted to you. Accordingly, you are familiar with the objectives of this proposal, and I should like to reaffirm an urgent plea to proceed with these plans and implement this proposal as soon as possible.

The third consideration which I should like to emphasize in this proposed budget is concerned with the establishment of centers of cardiovascular research located in strategic parts of the country. Here, again, there is no need for me to dwell upon the details of this proposal, since they have been made available to you in Dr. Irving Wright's statement to which I referred earlier. I would like, however, to state that the nucleus for such cardiovascular research centers already exists in a number of institutions throughout the country. Accordingly, little difficulty would be encountered in putting this proposal into immediate operation. Gradually over the next few years others could be developed and established.

In this connection I should like to take this opportunity to emphasize the great value of the research training grants program of the National Heart Institute. In large measure the gratifying expansion and intensification of cardiovascular research in this country has been due to this program. In many respects this program constitutes the wellspring of further cardiovascular research endeavors. Indeed, the whole future of our research efforts in this important disease area is dependent upon the output of the young medical scientists who are receiving their research training through this grant program. With the increasing number of individuals with these talents and skills who are now becoming available, the proposal to establish special cardiovascular research centers assumes increasing importance. It is my strong conviction that there could be no better way of furthering the purpose of the National Heart Act. Indeed, I can think of no better way of expressing the objectives of these proposed cardiovascular research centers than to use the language of the National Heart Act, i.e., to "conduct researches, investigations, experiments, and demonstrations relating to the cause, prevention, and methods of diagnosis and treatment of diseases of the heart and circulation," to "promote the coordination of all such researches and activities and the useful application of their results; provide training in matters relating to heart disease, including refresher courses to physicians, "thus permitting more rapid and effective acquisition and dissemination of new knowledge for clinical application.

Finally, I should like to express sincere and grateful appreciation for the sympathetic understanding and generous support which you and other Members of Congress have displayed in the establishment and furtherance of research in cardiovascular diseases. It is now just a little over a decade since the establishment of the National Heart Act. During this period and to a major extent on the basis of this act, truly phenomenal progress has taken place in the cardiovascular field of medicine. Indeed, the advancements made and the knowledge gained during this period far surpass all previous efforts in this area of endeavor. The tremendous strides that have been made during the past decade clearly reflect the vigor and intense activity characterizing the current status of cardiovascular research and portend other advances of even greater importance. You have every reason to take pride in the important role you have played in these developments, and, with your continuing generous support of these research endeavors, only the limits of imagination can restrict their progress.

Budget

	1960 President's budget	Increase for normal growth and develop- ment	Total
Grants:			
Research projects.....	\$24, 643, 000	\$10, 857, 000	\$35, 500, 000
Research fellowships.....	2, 163, 000	500, 000	2, 663, 000
Training.....	7, 152, 000	2, 000, 000	9, 152, 000
State control programs.....	2, 125, 000	2, 000, 000	4, 125, 000
Direct operations:			
Research.....	7, 266, 000	770, 000	8, 036, 000
Review and approval.....	790, 000	300, 000	1, 090, 000
Training activities.....	154, 000	46, 000	200, 000
Professional and technical assistance.....	1, 101, 000	1, 399, 000	2, 500, 000
Administration.....	200, 000	34, 000	234, 000
Total obligations.....	45, 594, 000	17, 906, 000	63, 500, 000
Special allocations:			
Primate colony.....			11, 000, 000
Centers of cardiovascular research.....			15, 000, 000
Total.....			89, 500, 000

STRENGTHENED PROGRAMS FOR RESEARCH AND TRAINING

Dr. DE BAKEY. I am appearing here primarily to support the increase in funds for the National Heart Institute in the amount contained in the budget to which Dr. Stare has referred. I am fully in accord with every statement he has made in regard to the proposed budget.

I think there are three main aspects to which I would like to refer. First among these is the need to maintain and further strengthen the programs of research and training which have brought about so much progress in the attack upon diseases of the heart and blood vessels.

In his statement to the subcommittee of the Committee on Appropriations of the House of Representatives which is available to you, Dr. Irving S. Wright presented some of the exciting new developments, particularly in relation to the problem of atherosclerosis derived from these research endeavors.

SURGICAL TREATMENT OF ATHEROSCLEROSIS

I thought you might be interested to hear a little bit of what has been done in recent years, particularly through the funds appropriated by the Congress, in support of the program of the National Heart Institute in regard to surgical treatment of atherosclerosis.

Senator HILL. Doctor, we would be most happy to hear that because we are constantly confronted with this proposition: "Well now, we have been appropriating this money; what have we to show for it?"

As you know well enough, in a field such as this, it does not always lend itself to a mathematical proposition; it does not always appear just like we see the clock on the wall up there, so any evidence at all in that manner would be most helpful to us in securing additional funds.

Dr. DE BAKEY. Of course, there is always need for better understanding on the part of Congress. So long as we have some means by which we can effectively treat a disease, we are making progress.

Now, as I said, there have been some very interesting, and I think impressive, developments in recent years, primarily in the past few years, in atherosclerosis.

Owing so its predilection to involve and block such vital arteries as the aorta and those that supply blood to the brain and heart, atherosclerosis is by far the most common cause of death and disability.

In recent years through intensive research and clinical investigations, supported largely by funds obtained from the National Heart Institute, an important concept of the disease has evolved, which has led to the development of highly effective methods of surgical treatment.

This concept is based upon the demonstration that in many of its forms the atherosclerotic lesion is well localized and segmental in nature, with relatively normal arteries proximal and distal to the diseased vessel

DANGER OF SMALL LESIONS

We have seen cases, for example, where the lesion is hardly more than half an inch, or even a quarter of an inch in length. The rest

of the artery, above and below this lesion, is perfectly normal, but the fact that the lesion is only a half centimeter in length does not necessarily mean that it cannot lead to serious consequences. That is all that may be needed to block the flow of blood and if it blocks an important blood vessel like a cardiac artery or one that leads to the brain or one that leads to the kidney, very serious consequences may result and it even may be fatal.

REMEDIAL MEASURES DEVELOPED

Through studies of the many forms of atherosclerosis, it is now possible to make an accurate diagnosis and to locate the extent of the involvement by means of arteriography. When tests show that it is well localized it is possible by surgical means to either remove it, or to overcome the blocking effects in the vessel by replacing it or by patching it with a substitute blood vessel, and this, of course, brings me to the fact that through these intensive research efforts, substitute blood vessels have been developed which can work quite satisfactorily in maintaining the blood flow.

There have been many different types of substitute blood vessels that have been made available now. We have the plastic material such as dacron, textron, and so on. There is, of course, still much work to be done to further improve the findings on these plastic arterial substitutes. While they are not entirely ideal, they function quite effectively and satisfactorily for our purposes at the present time. But, of course, we are constantly securing better ways of doing things and there are many new projects underway now to try to develop this field.

To come back to the treatment of these well localized lesions. These lesions may occur particularly in the larger arteries, such as the aorta, or they may have their origin in the smaller arteries, or part of the main branch of the aorta, or the smaller arteries in the lower extremities. Until recently, for example, a large proportion of patients with lesions of this kind involving the lower extremities would ultimately have gangrene. Many of these patients today are being saved from developing gangrene. Many of these patients were disabled because of the inability to walk any distance owing to the deficiency of the blood supply and now they are being restored to a full working ability and are able to resume a very active, normal life.

Senator HILL. In other words, the circulation of blood is coming through properly now, as it should have all the time?

Dr. DE BAKEY. That is true.

APPLICATION OF TECHNIQUES TO VESSELS IN BRAIN

Now one of the most exciting developments, I think, in this regard in the last few years, particularly, has been concerned with the application of these principles involved in this concept as it concerns blood vessels to the brain.

Dr. Stare has already referred to the importance of this form of disease which causes so much disability and death, resulting particularly in the form of strokes.

We formerly believed that strokes were due to hemorrhage or thrombosis of arteries within the skull supplying the brain.

During the past few years and, as a result of intensive research efforts, it has been found that in a high proportion of patients these intracranial arteries may be normal and the actual block causing the stroke lies in the more proximal extracranial part of the arteries in the neck or chest. With these people that have strokes which are really well localized in the main part of the blood vessel outside the skull, that is, in the neck or chest, it has been found that the blood vessel extending beyond the lesion is perfectly normal, and this fact has been well demonstrated.

Now the same principles of treatment may be applied to these well localized lesions which have been applied elsewhere. It is possible in these cases to correct these lesions and consequently restore the people to normal activity, normal function, and to normal circulation in the brain. We have had the very gratifying experience of seeing pictures of two stroke patients completely relieved within half an hour after an operation. In fact, with some patients that we have seen with strokes and with paralysis, they have been completely relieved before the completion of the operation, this being evident to us because the patients were conscious, since they were being operated upon with local anesthesia.

A patient under anesthesia may wake up before the operation is complete and with his complete functioning restored. It is true this does not occur very often. There is much work that needs to be done in this field of research.

We do not actually know the extent to which these lesions, extracranial vessel obstructions, account for strokes. We do know they do not account for all of them. Our own experience would suggest, however, that it accounts for a fairly high proportion of them.

In our experience, patients with this kind of manifestation, with a cardiovascular deficiency, as we use the term, about 40 percent of them have lesions that are not within the skull. They are localized outside the skull and in the blood vessels of the neck and chest, which we can treat by surgical means.

FUNDS NEEDED FOR EXPANDED WORK

Now this is merely one example of the need for funds to support research. This is one that needs a great deal of additional work in order to see if we cannot apply these methods of therapy more rapidly and more effectively.

There is need for much more work in the whole area, in order to understand the necessary aids to circulation, and its effects on the brain. We already have some formal concepts of this that are based upon our animal work. Dr. Stare has already referred to the fact that it is extremely important to do research work on animals that are closely related to man. In some of the primates this would be true. It is for this reason, of course—as well as for other reasons—that we need support in the establishment of primate colonies, which I think is urgent.

There is need for further investigation and further research work. We are using arteriography for this purpose, and there are certain disadvantages in the forms of arteriography that are used. While reasonably safe, new methods need to be explored, and a great deal of work needs to be done.

I might say, too, one other reason for doing work in this field is because it has given us a better understanding of the dynamic circulation and that is something else on which we need additional knowledge.

Senator HILL. When you work in that field you find you are getting into some other fields, is that right?

COOPERATIVE INVESTIGATIONS

Dr. DE BAKEY. Yes, sir. I think it would be interesting to the committee to hear that the National Heart Institute has just recently embarked upon a program of elaborate investigation with units which are strategically located in various parts of the country. There are already about 20 units involved in this work on this particular aspect of cardiovascular deficiency.

These research units will not only investigate the application of this concept as a form of therapy, but they are also carrying out research toward a better understanding of the problem, and a better understanding of the factors affecting the circulation.

Now, I believe that the number of people in our country who are involved and stricken down with strokes certainly justifies the additional funds being requested to support this very important project.

Dr. Stare has already indicated the extent of this form of cardiovascular disease and its effect upon our economic capacity, and it seems to me that this is a very small amount of money to invest, and this is of such importance to our country, of course, not only from the economic standpoint, but from the humanitarian standpoint.

I think, after all, it is a help in our overall economy.

NEED FOR PRIMATE COLONIES

Now, Dr. Stare has already referred to the primate colony and I have briefly referred to it, and I would like merely to reaffirm the plea to proceed with the establishment of these primate colonies.

I have had some familiarity with the plans developed along this line, and I think the time for us to proceed with the establishment of primate colonies is now.

CENTERS OF CARDIOVASCULAR RESEARCH

Finally, I want to also emphasize the concept of the establishment of centers of cardiovascular research, which Dr. Stare has referred to, and which Dr. Wright referred to in his testimony before the House of Representatives. All of the things which Dr. Stare has stated about cardiovascular disease, I think, are extremely important in terms of the expansion of research, the classification of research in this field, and of a more extensive and wider application.

I cannot refrain from referring to the language of the National Heart Act, in support of this, because there seems to be no better way to stress it.

If I may, I would like to refer to this prepared statement, which I will read from for a moment:

It is my strong conviction that there could be no better way of furthering the purpose of the National Heart Act. Indeed, I can think of no better way of expressing the objectives of these proposed

cardiovascular research centers than to use the language of the National Heart Act, that is, to—

conduct researches, investigations, experiments, and demonstrations relating to the cause, prevention and methods of diagnosis and treatment of diseases of the heart and circulation—

to—

promote the coordination of all such researches and activities, and the useful application of their results; provide training in matters relating to heart disease, including refresher courses to the physicians—

thus permitting more rapid and effective acquisition and dissemination of new knowledge for clinical application.

NIH RESEARCH AND TRAINING GRANTS

I think in this regard it is also important to state that the research and training grant program of the National Heart Institute has provided a very great expansion of the training opportunities and the training of individuals, medical scientists, all of whom are able to carry out effective research in this field.

The cardiovascular research centers would provide a very effective way of utilizing this output of research centers.

Finally, I should like to express our sincere and grateful appreciation for the generous support which you, Senator Hill, and other members of Congress, have displayed in the establishment and furtherance of research in cardiovascular diseases.

PROGRESS UNDER NATIONAL HEART ACT

It is now just a little over a decade since the establishment of the National Heart Act. During this period and to a major extent on the basis of this act, truly phenomenal progress has taken place in the cardiovascular field of medicine. Indeed, the advancements made and the knowledge gained during this period far surpass all previous efforts in this area of endeavor. The tremendous strides that have been made during the past decade clearly reflect the vigor and intense activity characterizing the current status of cardiovascular research and portend other advances of even greater importance.

You have every reason to take pride in the important role you have played in these developments, and with your continuing generous support of these research endeavors only the limits of imagination can restrict their progress.

Senator HILL. Doctor, you came a long way to be with us this morning and, as always, you brought us a most excellent challenging statement. We appreciate this statement or story of the truly phenomenal progress that has taken place in the cardiovascular field of medicine, and as I listened, I recalled that in 1881 Dr. John B. Roberts, the distinguished surgeon of Philadelphia, predicted that some day the heart would be sutured and Dr. Billroth, who at that time was the great Viennese surgeon answered by saying "that any surgeon that attempted it, deserved to lose the respect of the medical profession," so there has been tremendous progress; and certainly you, yourself have contributed so much to this phenomenal progress.

BEGINNING OF HEART SURGERY

Dr. DE BAKEY. Senator Hill, you own father, of course, carried out this surgery. I think you should be proud of your heritage in this regard.

Senator HILL. Thank you. One reason I remember the year 1881 is that it was in that year that my father graduated in medicine in New York and he was conversant with John B. Roberts' statement, and also Billroth's statement. Dr. Billroth's statement perturbed him. He came home and began to study the heart and carried on some experiments on dogs and other animals and finally had his opportunity in 1902, when a stab wound of the heart was brought to his attention. But all that you have told us is tremendously gratifying and challenging as it is, it just shows the possibility for the future, and we will continue to press forward, is that not true?

FUTURE PROMISING

Dr. DE BAKEY. There is no doubt about that. I feel that the field of cardiovascular disease is brighter now than ever before, and I think it would be truly a pity if we were to curtail the planning of this program at this time. Now is the time to intensify and expand the program and take advantage of the many leads which are available. This is, as you know, the only way we are going to reach our goal in a shorter period of time.

Like Dr. Stare, I do not think there is any better investment for our funds. I, too, would like to see a balanced budget, but I do not believe you can balance the budget by skimping in medical research. This concerns the health of our people and it seems to me this is the highest form of priority, and with any form of budgeting, priorities should be employed. Even if it is necessary to increase our taxes in order to improve the health of our people, as far as I am concerned, I think it is the most important thing in our life.

Senator HILL. We all know the great work you are doing, and I only wish that the entire Congress could have been here this morning to have heard your statement, and Dr. Stare's statement. I am sure they would have been much impressed with these statements, just as I have been.

Dr. DE BAKEY. I brought along a journal in which, in this month's issue, has illustrated the progress that has been made in this field.

It shows the nature of the lesion and the treatment.

Senator HILL. Would you identify that journal for the record, Doctor?

Dr. DE BAKEY. This is the May 1959 issue of the Annals of Surgery, and there are two articles which I would be glad to leave with the committee.

Senator HILL. All right, they will be filed with the committee.

Now if you leave those things with us we will certainly appreciate it. I want you to know we are deeply grateful for these very fine, excellent presentations by both you and Dr. Stare. We deeply appreciate the great work you are doing.

However, looking at Dr. Stare, I would like to have him tell me enough about nutrition and diet, so that I will never have to come to this point. The thought of these plastic tubes substituting for your blood vessels, is all very fascinating, but I would rather think of it in

terms of being maybe used for the chimpanzees you are talking about. My assistant here, Mr. Downey, gives me a long amen on that.

We are certainly very grateful to you for your fine presentations, Dr. De Bakey and Dr. Stare.

ARTHRITIS AND RHEUMATISM

STATEMENTS OF DR. WALTER BAUER, CHIEF OF MEDICAL SERVICES, MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MASS., PROFESSOR OF CLINICAL MEDICINE, HARVARD UNIVERSITY, DIRECTOR, ROBERT W. LOVETT MEMORIAL FOUNDATION FOR STUDY OF CRIPPLING DISEASES

PREPARED STATEMENT

Senator HILL. Next we have Dr. Bauer and Dr. Darby. Dr. Bauer, I understand you are going to go first, and we will be glad to hear from you. We appreciate your being here very, very much, and will be delighted to hear any statement you wish to make.

Dr. BAUER. I am Dr. Walter Bauer of Boston. I will not identify myself any further because it appears in the prepared statement.

Senator HILL. We will put your statement in the record in full, which contains, I am glad to say, a little biographical summation here to start with.

(The statement referred to follows:)

STATEMENT OF DR. WALTER BAUER ON BEHALF OF THE ACTIVITIES OF THE NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES

(Dr. Bauer is Chief of the Medical Services, Massachusetts General Hospital, Boston, Mass.; Jackson, professor of clinical medicine, Harvard Medical School; Director, Robert W. Lovett, Memorial Foundation for the Study of Crippling Diseases; past president, American Rheumatism Association; past president, Association of American Physicians; past member of the National Advisory Arthritis and Metabolic Diseases Council; formerly chief medical consultant, U.S. Army Medical Corps, Eighth Service Command.)

Mr. Chairman and members of the committee, I appear before you today to speak on behalf of the research activities of the National Institute of Arthritis and Metabolic Diseases. I consider it a privilege to speak in support of the budget for this Institute. I am Dr. Walter Bauer, Jackson professor of clinical medicine at Harvard Medical School and chief of the medical services at the Massachusetts General Hospital. My experience in the past has included the private practice of medicine in Boston, Mass., postgraduate medical study under Sir Henry H. Dale, England, and approximately 4 years as Chief Consultant in Medicine, the U.S. Army Medical Corps, Eighth Service Command, during World War II. Having been engaged in the study of the rheumatic diseases for over 30 years, I have followed closely the rapid, orderly and requisite growth of this particular Institute and its invaluable programs of grants-in-aid for the support of medical research and training in the fields of arthritis, diabetes, and other metabolic diseases, gastroenterology, hematology, and last but not least, the newly conceived, rapidly developing field of physical biology. During the 4-year period, from October 1952 to September 1956 I was privileged to participate in the deliberations of the National Advisory Arthritis and Metabolic Diseases Council. I shall long remember this profitable tour of duty. It was then that I learned, firsthand, of the splendidly conceived and directed program which the National Institutes of Health administer.

The execution of these excellent programs required funds. These were made available in adequate amount only because of the valiant efforts of you, Mr. Chairman, and of your colleagues and Representative Fogarty and the members of this committee. I would be most remiss if I did not take advantage of this occasion to thank you honorable gentlemen for what you have done to make it possible for the physicians and the scientists of this country to wage a more in-

tense battle against disease. These appropriations are responsible for the ever-increasing interest and activity on the part of both professional and laymen concerning the importance of medical research in our efforts to alleviate and to prevent human suffering. The rewards, therefore, can be attributed in large part to the farsighted and aggressive leadership which you gentlemen have displayed so consistently. This, to my mind, remains one of the great untold stories in the history of medical research in this country.

We have been delighted that the possibilities for a broad approach to medical research have been provided by the actions of the congressional committees. This type of broad support engenders full efforts in fundamental research which is clearly the best route to ultimate solid accomplishments in many fields. One disadvantage of too narrowly categorized support for research is that of inevitable competition and imbalances. Under such circumstances, some individual diseases would be oversupported, both in relation to relative frequency in the population and the number of research personnel available for work on this disease. Others, more important and with much more general investigator interest, might have far too little support. In this connection, one need only turn to the liver. Galen, the great Greek physician and one of the first medical experimenters, in the second century A.D., with rare prophetic insight, regarded the liver as the "great here." He had not the slightest concept of its functions, except that of forming bile, but he was sure it must have some very important ones. Now we know that the functions of the liver are literally without number. It is the great chemical industrial plant and storehouse of the body. It is the heart of metabolism and metabolic disease. Yet one hears relatively little about the liver or its diseases. It has no institute, no special fund, and surprisingly few champions. It is often included in the realm of gastroenterology, but from the standpoint of its central role in body metabolism, it is the tail wagging the dog. One need only visit any of the large hospitals in this country to be impressed with the problem of liver disease. Of course, not a little of it is a direct sequel of alcohol and dietary inadequacy. But I see no signs of a diminishing insult to our population from alcohol. This constitutes a great metabolic problem of which cirrhosis of the liver is only one of the more common end results. Time will not permit me to cite other disadvantages of too narrowly categorized support for research.

I therefore will review briefly the magnitude of some of the problems which confront medical investigators concerned with the study of diseases which afflict man. Before doing so, I wish to state how pleased I was to learn that physical biology, one of the most basic biological disciplines and one of relatively recent origin, has found its home in the National Institute of Arthritis and Metabolic Diseases since I left the Advisory Council in 1956. I believe it can be truthfully said that this field of research will undoubtedly prove to be one of the richest sources of new knowledge from which will come many future major advances in medicine.

Research in arthritis and physical biology provides a number of fascinating relationships. The first of these medical areas, which includes a large group of major disease problems, represents the earliest interest of this Institute.

The study of the rheumatic diseases at the present time is no easy task. The lack of clearly defined leads concerning their cause and cure creates a situation in which no single methodological approach seems clearly indicated and many approaches are possible. With the knowledge that the connective tissues are the site of arthritis and related diseases, it has become necessary to undertake a characterization of the tissues involved, so that as the normal is defined, we can better interpret the alterations produced by disease. The structural and chemical characterization of the connective tissue components (fibrous proteins, such as collagen, complex sugar compounds called mucopolysaccharides, and sugar-protein substances commonly referred to as glycoproteins) requires knowledge of biochemistry, biophysics, physiology, and other basic sciences.

Physicians who are engaged in the study of diabetes, other endocrine and metabolic disorders, peptic ulcers, diseases of the liver and blood, ulcerative colitis, cystic fibrosis, and a host of other baffling afflictions must also rely on the knowledge and on the discoveries made by the biochemist, the biophysicist, the physiologist, the immunologist, and other basic scientists. Thus it has become increasingly necessary for physicians who wish to study any one of these diseases to embody both clinical medicine and basic science in their training. By doing so, they can comprehend the contributions of their fellow scientists and fully exploit the opportunities thus created and thereby enhance our understanding of disease.

This new broad and fundamental approach to the study of disease has been sponsored by the National Institute of Health. In assuming this responsibility,

it has been necessary to provide support for research in areas pertinent to the medical sciences and for the training of individuals who desire careers in one of the medical or related sciences. To do so demands cognizance of certain irrefutable facts.

If we are to take full advantage of the many opportunities which become available in increasing numbers and varying kinds, we must invest heavily and with the definite understanding that both a prolonged interest and a definite commitment are essential. We must also permit the topflight investigators, trained and supported by these funds, a maximum of flexibility in exploiting leads uncovered by themselves and by their fellow scientists. It is important that we understand that a seemingly obscure discovery, for example, disclosed by an investigator working on the metabolism of steroids (hormones), which as you know are used for the relief of arthritic pain, may provide the key to one cause of peptic ulcer. And last but not least, we must appreciate that the results obtained in terms of our national interest and our responsibilities to our fellow men can and will provide unusual dividends in consideration of the time, effort, and money invested.

With these thoughts in mind, the National Advisory Arthritis and Metabolic Diseases Council has prepared a summary of the estimated financial needs of this Institute for the coming fiscal year. I am told that these figures have been prepared according to the methods employed in previous years. Therefore, they may well prove entirely too conservative, as have the estimates for each earlier year. For instance, the appropriation increase enacted for the current year permitted the support of approximately 1,400 research grants in the amount of \$18,650,000. Remaining-unpaid, however, because of limited funds are some 200 approved requests totaling over \$3 million. These unfinanced applications are distributed over a major portion of the various program interests of this Institute. In the opinion of the Council, then, the following sums represent a reasonable and justifiable estimate of the Institute's needs:

	1960 President's budget	1960 needs
Grants:		
Research projects.....	\$18,898,000	\$34,700,000
Research fellowships.....	337,000	500,000
Training grants.....	4,435,000	7,500,000
Total grants.....	23,670,000	42,700,000
Direct operations:		
Research.....	6,837,000	7,508,000
Review and approval.....	546,000	830,000
Administration.....	162,000	162,000
Total direct operations.....	7,545,000	8,500,000
Total.....	31,215,000	51,200,000

A word of explanation concerning the figure for research projects should be added. The subtotal of \$34,700,000 includes approximately \$3 million required to bring the allowances for indirect costs to a more nearly adequate level. The problems posed to our universities and research institutions by the current limitation of 15 percent for indirect costs further increases the already crucial financial burdens which they are presently carrying. Because of this acute need, the Council recommends that a more realistic allowance be permitted. I feel certain that the Council, however, would deplore an increase for such a purpose at the expense of funds badly needed for the support of approved research projects.

I have noted with considerable interest the recommendation of the House of Representatives for the appropriation for this Institute. It appears to be liberal, and Mr. Fogarty and his committee are to be congratulated on taking such a firm stand to assure continuation and increase of programs. On the other hand, if this increase alone should stand and the Institute received no more for research grant support, it would find itself again in the position where it could not support several million dollars worth of approved high-quality projects. Such a situation, at the best, delays starting much needed research for a year or more, and, as you will understand, does not improve the morale of many competent investigators who are anxious to get on with the job. I would strongly urge again that the Council figures represent the realistic needs for the support of this broad rapidly expanding program.

In my opinion, the amount of money requested in the 1960 budget for fellowship support should be increased from \$500,000 to at least \$750,000. Why? Because the future success of the Institute's research program will depend upon our success in recruiting young men of unusual promise and our ability to support them beyond their period of training by means of special fellowships. Without the latter type of fellowship support, our medical schools, university teaching hospitals, and research institutions cannot include many of these much needed, new breed of physician-investigators in their expanding research programs. Why? Because their annual budgets are already inadequate.

What would this budget provide in terms of arthritis and physical biology? To obtain the proper perspective, we should remember that, if one includes the members of the victim's family, approximately 30 million people in this country are affected by the scourge of arthritis. Of this number, about 12 million actually suffer from this greatest of all crippling diseases. It is estimated that approximately 1 million arthritics are permanently disabled. They constitute a persistent drain of considerable magnitude upon the resources of their families and their communities. Unfortunately, this sizable segment of our population contributes very little to the country's economic strength. Instead, they must resignedly face an unproductive life, frequently spanning several dreary decades, racked with pain, confined to wheelchair or bed, and proving to be a physical, financial and mental burden to those around them.

I am sure a question which naturally occurs to all of you is, "What about all these new drugs which are described in such glowing phrases?" The answer is that many of these newer therapeutic agents are more effective than the drugs previously employed. However, we must admit that even the ideal palliative is not yet in sight. That the true significance and impact of these new compounds is far greater than this is best illustrated by a brief consideration of the conditions which existed prior to the first use of the steroids. For generations, the unfortunate victims of rheumatoid arthritis were usually relegated to what might be termed the dark closet of medicine. Faced with a chronic crippling disease of long standing for which they had no effective therapeutic agent, the physician and the physician-investigator alike shunned the problem and turned to work on ailments with greater promises for alleviation or cure. Except for a handful of dedicated and persistent individuals, few physicians accepted the challenges posed by this group of patients with arthritis and related diseases.

The dramatic advent of cortisone in 1948 was a real milestone in the rheumatic disease field. It provided for the first time hope of a really effective treatment for the arthritis victim. An equally important if not more important byproduct was the virtual outburst of increased research activities of far broader scope than was ever before undertaken. I will cite a few examples. For instance, research still continues on the various steroid compounds in the hope of not only finding a more effective therapeutic agent but also a better understanding of the role of the naturally occurring steroids in the maintenance of healthy joints and tissues. With the recent knowledge that the arthritides cause marked alterations in the connective tissues of the body, there has resulted an increasing interest in their characterization and the respective functions of their component parts. The pathologist, the biophysicist, the biochemist, the physical chemist, the endocrinologist, and the physician are all investigating different aspects of the connective tissues.

In our efforts to broaden further the attack on these problems, two new areas of great promise are receiving increased attention by a varied group of workers. The first of these concerns the immunological aspects of arthritis. A blood protein, called the rheumatoid factor, has been found to be almost uniquely associated with the disease, rheumatoid arthritis. This factor is found in the globulin fraction of the plasma proteins wherein are found a wide variety of antibodies. This suggests a possible reaction to a foreign substance or to the altered state of one of the body's own constituents. Although the proper assessment of this information remains to be determined, it does provide a new and potentially rewarding approach in a field which badly needs fresh ideas.

The second promising area concerns a renewed effort to find or reproduce in an experimental animal a condition which more nearly resembles human arthritis. A recent conference, sponsored in part by this Institute, brought together a number of the country's leading experimental pathologists and veterinarians. Those who attended came away enthusiastic about the possibility of a number of new investigative tools and approaches being developed through this medium.

You may well ask, "Where does physical biology fit into all of this?" I would reply that there are many examples of research in the field of arthritis in which

there runs the thread of promise which the techniques of the biophysicist hold for major advances in this field. Take the example of the connective tissue protein, collagen, for instance. We need to learn much more about the characteristics of this ubiquitous substance, what are its properties in the natural state, and how and to what extent and under what conditions these may be altered in health and in disease. Bringing to bear on these problems the techniques and ideas of the biophysicists provides one of the most exciting and promising developments in recent years. But the promise inherent in the biophysical approach is not limited to arthritis alone. Its potential is of equal consequence to the other disease states previously mentioned. In both the fields of gastroenterology and diabetes, the nature of the absorptive process or the passage of substances across cell membranes is of immense importance. It is here that physical biology promises to open new avenues of investigation of problems relating to all the diseases mentioned previously which have frustrated scientists for years.

In 1875, Apollinaire Bouchardat, the most famous diabetes clinician of all times wrote: "I do not believe I am wrong in saying that among 20 men between the ages of 40 and 60 years, belonging to legislative assemblies, in noted learned societies, occupying high positions in commerce and finance, and even in the army, one is sure to find a glycosuric (diabetic)." This predicted incidence of diabetes in men between the age of 40 and 60 years is even greater in 1959. Approximately 3 million people in the United States have diabetes. This is an incidence of 1.7 percent. In the city of New York, 2 percent of the adult population have the disease. The ratio of diabetic deaths to total deaths has advanced from 0.55 percent to 3.09 percent in the last 50 years. This does not take into account the nonrecognized diabetic deaths or the priorities in classification in which the listed cause of death actually is aggravated, precipitated, or complicated by coexisting diabetes. In 1956, diabetes was in the 8th place in the list of causes of death in the United States, while it was in 27th place in 1900. According to the experience of the Metropolitan Life Insurance Co., diabetes is the fifth most common cause of death in their industrial premium-paying group, surpassed only by deaths from violence, cancer, heart disease, and vascular lesions. Contrast this with the fact that Dr. Joslin, of Boston, long an internationally recognized authority in the field of diabetes, found only 172 cases of diabetes in the records of the Massachusetts General Hospital between 1824, and 1898.

As the aging of the population in the United States increases, the incidence of diabetes has become greater, and as the life expectancy is improved, this increased frequency of diabetes will continue, since we know that the majority of cases of diabetes have their onset between the 45th and 65th years of life. Various screening surveys have set the incidence of undetected diabetes at 0.1 percent to 8.3 percent of the population tested, indicating that a large reservoir of undetected cases exists. It is of special interest that 89 percent of diabetics are overweight at the onset of their disease if this occurs after the age of 30.

In 1957, 18 percent of the newly blinded in Massachusetts were diabetics. In England, 8 percent of blindness was due to diabetes in 1949 and 1950, and 13 percent in 1954 in the 50 to 70 age group. Thus diabetes is fast becoming a leading cause of blindness. This is especially true in the younger age group.

The nervous system is also adversely affected by the diabetic state and up to 70 percent of patients with diabetes of 10 or more years duration have had disturbances due to this one, lone complication.

With the ability to prolong life in diabetes, coronary artery disease, apparently aggravated or induced by the existence of the diabetic state, has become an ever-increasing problem and the major cause of death among diabetics generally. Arterial degeneration (hardening of the arteries) in the arterial tree to the lower extremities is another dreadful consequence of the long-term diabetic state, especially in the poorly regulated cases.

In a 12-month period in 9 Massachusetts hospitals, 502 diabetic patients spent an average of 26 days in one or another of these hospitals, and 33 deaths occurred among 332 operations. The financial cost, including hospital charges, but without any allowance for professional charges of physicians or surgeons, was estimated at \$500,000. There is no way to estimate the loss of income to the individuals involved that this calamity entailed, nor to estimate the cost to public assistance agencies of their rehabilitation or subsidization as disabled persons, but the figures are obviously astronomic considering the country as a whole.

There is great need for increased research effort in the field of diabetes and for the training of research workers as well as physicians. I will list only a few of the problems which require further intensive study, if we are to control the many complications of this disease, and last but not least, learn how to prevent them.

Diabetic nephropathy, for which, unfortunately, no specific treatment can be offered, has become the leading cause of death among those unfortunate enough to acquire their diabetes in childhood or youth. Thus, while having the knowledge and materials to keep an ever-increasing number of young diabetics alive and well for 10 or 15 years after the onset of their disease, many are cut down in early life by this dreaded complication about whose pathogenesis (cause and nature) we know practically nothing.

Research in diabetes has produced many dramatic advances, the latest of which are the oral agents, which have proved not only a boon to those patients who respond, but a forceful stimulus to investigation of the insulin release mechanism in the pancreas and the whole fundamental concept of the nature of diabetes.

In the clinical field, research is providing increasingly useful knowledge as to the interplay between the hormones of the pituitary and the adrenal glands and the status of carbohydrate (sugar) metabolism in the body. Surgeons interested in diabetes are making much progress in the salvage and prevention of amputation of limbs impoverished by compromised blood supply by means of daring procedures with grafting of damaged vessels and "reaming out" of collections of atheromatous (hardening of the artery) material. Obviously, this work in diabetes has its carryover into treatment of vascular lesions due to aging alone.

On the fundamental level, great strides in the understanding of the action of insulin have been made, and concerted attention has been focused on enzymatic processes responsible for the utilization of carbohydrate (sugar) and fat. The whole new field of regulatory biochemistry, looking into the controlling relationship between carbohydrate, protein, and fat metabolism, has opened up with the advent of new techniques developed in the programs of research in diabetes. A fresh attack upon the difficult but vital process of membrane permeability and its regulating mechanisms has come from the existing research work being done on the mode of action of insulin. Further understanding of this process will require help from research workers in the field of physical biology.

From this brief presentation of the status of diabetes as a national health problem, as an area for investigation on all levels, and as a challenge for service to physicians to render good medical care in this important disease area, the role of grants from the National Institutes of Health can be clearly seen. This support has meant improvement and extension of training of physicians to render essential service to the very large diabetic population; it has already made fruitful efforts into practical and fundamental research; it has given a fresh impetus to our determination to find the answers to the problem of complications of diabetes, atherosclerosis (hardening of the arteries) and the aging processes. It is for these reasons that I give my wholehearted and unqualified endorsement to the continuation of this U.S. Public Health Service program. I deem it one of the most important in the promotion of national health.

Gastroenterology (diseases of the gastrointestinal tract) includes many serious diseases such as peptic ulcer, ulcerative colitis, ileitis, liver diseases including cirrhosis of the liver, as well as various disorders of the pancreas and gallbladder.

In the field of gastroenterology, the incidence of certain of its diseases is equally as impressive as some of the previously noted figures on incidence of disease in the population of our Nation. For instance, peptic ulcer is found in 7 to 12 percent of the American population, yet the mechanism of production of this disability is still not well understood. Over one-third of the cases of peptic ulcer come to operation, with removal of a large portion of the stomach. Over 30 percent of the individuals so operated have complications such as the "dumping syndrome" (fainting, sweating, and malabsorption).

The disease ulcerative colitis affects all age groups, from infants to old age. Its etiology is completely obscure. This area, the cause of ulcerative colitis, and the basic mechanism have received so little research emphasis that the National Institutes of Health called a special conference in January 1958 to promote research in this important, extremely disabling, and not infrequently fatal, disease. About 10 to 12 percent of these patients develop cancer of the colon. One of the important questions to be answered in connection with this disease is: Why is this disease so common in the United States but rare in such countries as China and Japan?

As I stated previously, the liver is a most important and vital chemical-manufacturing plant of the human body. One disease of the liver, cirrhosis of the liver, can result from a latent hepatitis (inflammation of the liver) infection. It has become a significant cause of cirrhosis in this country. This form of cirrhosis is very fulminant in people under the age of 20 and about 20 percent of these are associated with ulcerative colitis. In the southern United States and in the

West Indies it has been observed that certain plants (*Senechia*) if eaten will cause a certain type of cirrhosis. Schistosomal (a parasite) cirrhosis has become more common in the United States, especially in New York with its large Puerto Rican population.

As you honorable gentlemen might suspect, the need for research in the field of gastroenterology is very great. For example, the absorption of foodstuffs from the intestine is essential to all of us, yet it is one of the most poorly understood areas of medicine still today. The complete mechanism of even the absorption of such simple substances as sugars and amino acids is not yet known. Malabsorption (failure to absorb foodstuffs from the intestine) is common in X-ray over-exposure or therapeutic X-ray radiation, tumors of the intestine or neoplasms which obstruct lymphatics, malnutrition and protein starvation, tropical and nontropical sprue, celiac disease (a not uncommon condition in children), recently found to be due to wheat sensitivity (gluten) following resection of the stomach or parts of the intestine, and regional enteritis.

Many of the diseases affecting the liver, if sufficiently severe, result in hepatic coma. From these observations alone, it becomes apparent that the liver supplies essential nutrients for the brain. We are only now finding out what these may be. This is but one more example of an area in which much basic research must be done.

The study of bile pigments must also be pursued most vigorously. The jaundice of the newborn occurs to varying degrees in all newly born and has recently been found to be due to the fact that the neonatal liver is immature and hence cannot handle pigments or drugs effectively. As a result of research in this one area, we now know that bilirubin (bile pigment) levels over 20-milligramm percent will cause damage to the developing infant brain very readily by inhibiting vital oxidative processes. Drugs must be administered to the newborn infant with caution because of his poor detoxifying capacity. Newly discovered forms of jaundice have been found to be hereditary and due to enzyme defects, examples being congenital nonhemolytic jaundice or the Crigler-Najjar syndrome due to defects in glucuronide-forming enzymes.

It has been my privilege to read the opening statement to this committee, of the Director, NIAMD. Here, I was made increasingly aware of many exciting and important advances due to the work of investigators at NIH or grantees in other institutions. I have had considerable opportunity to acquaint myself directly with a number of these researches. To my mind, one of the most significant at present is that relating to the stimulus to blood formation, especially of the red blood cells which are the oxygen transporters of the body. In recent years, it has been shown that at least a part of this stimulus resides in a substance present in the circulating blood, probably a mucoprotein, that is, a combination of a sugar and a protein. This has received the name "erythropoietin" to signify that it is responsible for erythrocyte (red blood cell) formation. Some very important work related to this substance, which is almost certain to lead to an improved knowledge of the nature and treatment of the anemias, is being conducted by several investigators at NIH or supported by Public Health Service grants at other institutions.

In connection with red blood cell formation, perhaps I may mention briefly another research project. This is being done by Dr. Cecil J. Watson, professor of medicine at the University of Minnesota, in collaboration with the School of Veterinary Medicine at the University of Minnesota. It relates to a rare but key disease involving the bovine, as well as human species. The disease is called erythropoietic porphyria because it is characterized by a great overformation and secretion by certain of the developing red blood cells in the bone marrow, of deeply colored, red-purple compounds known as porphyrins. The bones and teeth of these animals or humans, as the case may be, are red in varying degree. More important is the fact that one of these porphyrins is strongly light sensitizing; that is, it causes severe damage to light-exposed parts of the body. In the human cases, a tragic mutilation of face and hands eventually results, even in childhood. In the bovines, which are black and white Holsteins, the black areas are protected while the white areas suffer ulceration and scarring and, of course, loss of hair. The study of this interesting affliction is of importance in its own right, but it has much broader implications as to basic aspects of red blood and porphyrin formation. It is a genetic disease, an excellent example of an "inborn error of metabolism." Great expansion of research is needed in the whole area of genetic metabolic diseases. Members of this group, such as porphyria, serve to illustrate how disease can ramify across the arbitrary categories which we tend to establish, such as hematology, metabolism, biochemistry, genetics, and dermatology, all frequently represented in any given case.

In our enthusiasm for these tremendously promising research vistas, we must not lose sight, however, of the importance of the other major component of the Institute's responsibility. Without sufficient numbers of adequately trained investigators, these glorious plans will come to naught. Provisions for the proper training of competent scientists, therefore, must go hand in hand, and in many instances, precede the provision of essential research support. Highly skilled and productive workers must be given the opportunity to learn new and more effective approaches. Of even greater importance is the necessity for increasing the training opportunities for the promising novice. The complexities of modern medical research demand a high degree of scientific sophistication in our investigators if they are to meet the challenges and opportunities that are at hand. The proper training of individuals for a career in medical research is both long and costly, therefore, there can be no compromise. Provision for such training is bound to be expensive for the following reasons. The stipends awarded individuals in a training status must be sufficiently large to attract candidates of the necessary high caliber. Furthermore, the instructional personnel must also be of the highest quality, and they must devote a considerable portion of their time to this training activity. Lastly, in order to provide the desired numbers of highly and variously trained investigators, new training centers must be activated and financed. In addition, the current centers must be provided such additional funds as are necessary for expansion to maximal effectiveness and productivity.

Prior to the establishment of the training programs by the Institute in 1955, there were but eight centers in the United States where a well-defined program for training in the field of rheumatic diseases was available. It is no accident that of the training centers in arthritis today, the keymen of the training programs in 25 of these institutions received their training in whole, or in part, at one of these 8 institutions. And it is of even greater importance, that without funds appropriated by the Congress for these purposes, it is quite likely that there would still be 8 centers, and not only that, these centers themselves would have been seriously handicapped had it not been possible for them also to have received assistance through Institute training grants.

The ultimate goal must be to have a rheumatic disease training center in most of our medical schools. In such study units, actively engaged in research as well as care of patients, a questioning attitude must prevail. The trap of dogmatism must be avoided. Nothing is so conducive to healthy skepticism as an association with people who are devoting their lives to research. In this environment, viewpoints can be shared and integration can take place between individuals and within individuals. By these means, there is bound to be a more positive approach to disease.

Each year, more and more competent researchers, men of academic stature, are completing their training. These men are eligible to head up training programs. The majority of these individuals will have received their training and financial assistance from current and past appropriations for the Institute. Without further support for them and financial assistance for the new programs which these men are qualified to direct, the funds appropriated to date will not have achieved their maximal effectiveness.

Training potential in physical biology is presently at the same level as was the rheumatic disease program 4 or 5 years ago. This recently launched program must be developed and fully supported if this important basic science field is to be of the greatest service to the Nation in its quest for better medical care.

It is obvious that the fullest development in each of these fields and the others supported by the Institute cannot be accomplished in a few short years. The increase in funds recommended by the Council has taken into account an orderly growth based on the most efficient use of personnel and techniques available at the present time.

In closing, I wish to thank the committee for the privilege of being allowed to participate in these hearings. I hope that I have been able to contribute something that will be of help to you in your deliberations.

RESEARCH ON ARTHRITIS AND METABOLIC DISEASES

Dr. BAUER. I appear before you today to speak on behalf of the research activities of the National Institute of Arthritis and Metabolic Diseases.

As you might suspect, I consider it a real privilege to speak in support of the budget for this Institute.

Now, I have been engaged in the study of rheumatic diseases for over 30 years, and therefore I have followed very closely the rapid, orderly, and requisite growth of this particular Institute and also its invaluable programs of grants-in-aid for the support of medical research and training in the fields of arthritis, diabetes, and other metabolic diseases, gastroenterology, hematology, and last but not least, the newly conceived, rapidly developing field of physical biology.

For 4 years I was privileged to participate in the deliberations of the National Advisory Arthritis and Metabolic Diseases Council.

I shall long remember this profitable tour of duty. I did have the opportunity then to learn at first hand of the splendidly conceived and directed program which the National Institutes of Health administer.

This, of course, required funds and these were made available in adequate amounts, nearly adequate amounts, perhaps I should say, only because of the valiant efforts of you, Mr. Chairman, and your colleagues and of Representative Fogarty and members of his committee. I think I would be most remiss if I did not take advantage of this opportunity to thank you honorable gentlemen for what you have done to make it possible for the physicians and scientists of this country to wage a more intense battle against disease. These appropriations are responsible for the ever-increasing interest and activity on the part of both professional and laymen concerning the importance of medical research in our efforts to alleviate and to prevent human suffering.

I personally believe the rewards, therefore, can be attributed in large part to the farsighted and aggressive leadership which you gentlemen have displayed so consistently. This, to my mind, remains one of the great untold stories in the history of medical research in this country.

People like myself are greatly in your debt. We admire you no end, and we only hope that Dr. Stare will keep your vessels soft and you never need to go to Dr. De Bakey and that you can help in this battle for an indefinite period of time.

Senator HILL. May I interrupt you to say this, that we of this committee, and other committees and members of the Congress, if we have been able to make any contribution in this matter, it has been due in very large measure to men like you who have been willing to come here to Washington, at your own expense, give of your valuable time, to give us this information and tell us the story, provide us, so to speak, with the information as to what are the munitions with which to wage this battle.

You have not only done that, but also you have given us tremendous encouragement and inspiration that we might carry on, so we have a deep sense of obligation to you and our other distinguished friends who are here with us this morning, for being so tremendously helpful and so inspiring to us.

Dr. BAUER. Well, it is a mutual feeling. We appreciate that very, very much.

WIDE SUPPORT FOR TRAINING AND RESEARCH NEEDED

In the work of any one of these institutes, as with the Institute of Arthritis and Metabolic Diseases, wide support is required, not only for fundamental research but also for training. I personally believe

that there are certain disadvantages of too narrowly categorized support for research, and the inevitable competition and imbalances that result therefrom.

Under such circumstances, some individual diseases would be over-supported, both in relation to relative frequency in the population and the number of research personnel available for work on this disease.

Others, more important and with much more general investigator interest, might have far too little support. In this connection, one need only turn to the liver.

LIVER DISEASE

The liver is thought of as being the industrial plant and storehouse of the body. It is the heart of metabolism and metabolic diseases, yet one hears relatively little about the liver or its diseases.

It has no institute, no special fund and surprisingly few champions. It is often included in the realm of gastroenterology, but from the standpoint of its central role in body metabolism, it is the tail wagging the dog.

One need only visit any of the large hospitals in this country to be impressed with the problem of liver disease.

Of course, not a little of it is a direct sequel of alcohol and dietary inadequacy. However, we see no signs of this problem diminishing.

Senator HILL. Hepatitis disease is a disease of the liver, is that right?

Dr. BAUER. That is right.

This constitutes a great metabolic problem of which cirrhosis of the liver is only one of the more common end results, and time will not permit me to cite the other disadvantages of too narrowly categorized support for research.

I therefore will review briefly the magnitude of some of the problems which confront medical investigators concerned with the study of diseases which afflict man.

BASIC PHYSICAL BIOLOGY

Before doing so, I wish to state how pleased I was to learn that physical biology, one of the most basic biological disciplines and one of relatively recent origin, has found its home in the National Institute of Arthritis and Metabolic Diseases, since I left the Advisory Council, in 1956. I believe it can be truthfully said that this field of research will undoubtedly prove to be one of the richest sources of new knowledge from which will come many future major advances in medicine.

It can be said in another way: those of us in the clinics who are doing clinical investigation just have to depend upon basic sciences of this sort. We have to wait for the advances in these basic sciences before we can push ahead a little bit further in our attempt to further our knowledge or understanding of certain of these particular chronic diseases of unknown causes.

NO SPECIFIC CAUSES OR CURE OF ARTHRITIS

Research in arthritis and physical biology provides a number of fascinating relationships, and these I know because this is the field I have been in for 30 years, and that is because we have no leads as to the cause of arthritis and we have no specific cures. During the war years I made up my mind that perhaps the best way to tackle this problem was to find the normal tissue that comprises a joint by means of physical biology, chemistry, and the like, and as I came to understand the normal, then we could go back and study the diseases, and see what alterations of normals took place, and perhaps that, in turn, would give us leads as to what might be the cause or what might be the cure.

So, those of us who are mixed up with chronic diseases are very pleased that physical biology is finally under way.

RHEUMATIC DISEASES

Now, when it comes to the study of rheumatism, or rheumatic diseases, whatever you want to call it, all I can say is that from 30 years' firsthand experience, it is no easy job. We have no absolutely clearly defined leads as to the cause, nor do we have it as to the cures. Some of us, as I have already said, feel very strongly that until we have a better knowledge of connective tissue we cannot come to grips with the understanding of the normal, and if we do not understand the normal, it certainly is extremely difficult for us to understand the diseases.

Therefore, you will find that there is more and more time and money being spent to finding what proteins there are in connective tissue, what sugars there are in connective tissue, what fibers there are in connective tissue, and what they are made of, how they are formed, how they are destroyed; all so we can subsequently get a better idea of what is going on in these diseases.

ESTIMATED FINANCIAL NEEDS

Now, when it comes to the problem of financing, the National Advisory Arthritis and Metabolic Diseases Council has prepared a summary of the estimated financial needs of this Institute for the coming fiscal year, and I think it can be truthfully said that these figures have been prepared according to the methods employed in previous years, and I think it can also be truthfully said they will prove entirely too conservative, as have the estimates for each earlier year.

For instance, the appropriation increase enacted for the current year permitted the support of approximately 1,400 research grants in the amount of \$18,650,000. Remaining unpaid, however, because of limited funds, are some 200 approved requests totaling over \$3 million.

These unfinanced applications are distributed over a major portion of the various program interests of this Institute.

In the opinion of the Council, then, the following sums represent a reasonable and justifiable estimate of the Institute's needs and, Mr. Chairman, I would like to have this table inserted in the record which is found on page 7 of my statement.

1310 LABOR-HEALTH, EDUCATION, WELFARE APPROPRIATIONS

(The table referred to follows:)

ESTIMATE OF THE INSTITUTE'S NEEDS

	1960 President's budget	1960 needs
Grants:		
Research projects.....	\$18,898,000	\$34,700,000
Research fellowships.....	337,000	500,000
Training grants.....	4,435,000	7,500,000
Total grants.....	23,670,000	42,700,000
Direct operations:		
Research.....	6,837,000	7,508,000
Review and approval.....	546,000	830,000
Administration.....	162,000	162,000
Total direct operations.....	7,545,000	8,500,000
Total.....	31,215,000	51,200,000

A word of explanation concerning the figure for research projects should be added. The subtotal of \$34,700,000 includes approximately \$3 million required to bring the allowances for indirect costs to a more nearly adequate level. The problems posed to our universities and research institutions by the current limitation of 15 percent for indirect costs further increases the already crucial financial burdens which they are presently carrying. Because of this acute need, the Council recommends that a more realistic allowance be permitted. I feel certain that the Council, however, would deplore an increase for such a purpose at the expense of funds badly needed for the support of approved research projects.

SERVICE ON COUNCIL

Senator HILL. Doctor, you have served for 4 years on this Council which had to pass on these applications for grants in this Institute; is that true?

Dr. BAUER. That is right.

Senator HILL. And you know how carefully these applications were screened, how thoroughly they were studied, before they were approved; is that true?

Dr. BAUER. I certainly do. I also know how carefully the Council works in trying to prepare the budget for the next year. We are taxpayers, too.

Senator HILL. Certainly you are.

PRESENT NEEDS VERSUS BALANCED BUDGET

Dr. BAUER. And when it comes to this argument about, "Well, how about a balanced budget?" I would like to have a balanced budget, too, but in the meantime I think this should go ahead, even if it means an unbalanced budget, because, first, these jobs have to be done, and, secondly, while we are on an unbalanced budget we can be figuring out ways and means of balancing it.

For instance, I feel very strongly that if we had taxes on those things that are injurious to the health of human beings, that the money received from those taxes on those items would more than pay for the money that this group has been asking for today. This would be a perfectly easy way to finance it, by taxing alcohol, candy, cosmetics, and so on, and one could go on and list countless things, looking at the millions spent on cathartics and various other things that are dangerous to human beings.

If they are going to talk about an unbalanced budget and if that is going to interfere with it, let's have a tax on the individual people, and let that pay for this business.

It is foolishness that they should talk about the money. The money we are asking for is small pickings in comparison with the long side of what it stands for in terms of health, happiness, and a strong Nation, and all of the rest that we need and have to have.

Senator HILL. I think your suggestion is excellent, Doctor.

Dr. BAUER. The other thing I want to say about this Institute is that if we exempt heart, cancer, mental health, infectious disease and allergy, neurology and blindness, all the rest that has to come under this Institute of Arthritis and Metabolic Disease, there is an awful lot of medicine represented by this Institute.

FUNDS FOR FELLOWSHIPS

The one item I feel strongly should be upped is the \$500,000 allotted for fellowships. I think that that should go up to three-quarters of a million dollars.

Now, if I may take a little time I would like to speak specifically as it concerns certain of the diseases that this Institute is concerned with.

RHEUMATISM

Let's go to rheumatism. In the case of rheumatism alone it is estimated that there are approximately 30 million people in this country who are affected in one way or another by arthritis because the victims of the family are affected as well as the victim of the disease. Of this number about 12 million people actually suffer from this greatest of all crippling diseases. A million are permanently disabled. I do not need to enlarge upon what this constitutes in terms of magnitude of problem, to family, to community, to various agencies.

Someone might say: "How about these new drugs; haven't they done the trick?" The answer is they have helped us. They do make the situation some better. But they certainly have not provided us with the things we need and we are certainly a long way off from point of view of having in hand measures which will prevent these crippling diseases from coming to be.

Senator HILL. That ought to be the great aim.

Dr. BAUER. That will be the great day, yes.

EXPANSION OF KNOWLEDGE

It was in 1948 that cortisone came. Since cortisone came we had other hormones. It provided for the first time real hope for the crippled arthritic.

And equally important, if not more important, the byproduct was the virtual outburst of any number of research activities of far broader scope than was ever undertaken before.

This story you know all too well, Senator Hill, because you heard it year after year and you see it year after year. One thing leads to another. That is the fun of being in this. You never know what lies ahead. The branch of the road maybe one thought was no good,

once one travels up it, it is extremely exciting as regards finding as well as reward.

For instance, research still continues on these hormones in the hope of finding one that will be better but also the hope of obtaining a better understanding of how in normal people their joints are kept normal. This is awfully important because if we don't learn this we aren't going to learn to prevent these things.

Here, then, as I said before, we are in this field. We certainly have to rely on the pathologist, physiologist, biochemist, the biophysicist, and all of these basic science people.

RHEUMATOID FACTOR

Right now there is a lot of time, effort, and energy being put into the study of a blood protein called the rheumatoid factor. This is a new leaf. It is quite an exciting one. Whether it is going to come to naught, only time will tell. But it certainly will tell us a little more about what goes on in the body of an individual afflicted with this disease. Whether it will lead to better understanding of cause or the nature of the disease of course remains to be seen.

Here is where we who are working in this and other chronic disease fields believe that this physical biology business is going to be of tremendous help to us and that is why we are so interested in seeing this get off to a good start.

DIABETES

Now I might go on to say a few words about an equally distressing situation, namely, that caused by diabetes. I would like to read a statement written by a Frenchman by the name of Appollinaire Bouchardat in 1875. That man is classified by some as the most famous diabetes clinician of all times. What did he write? It was as follows:

I do not believe I am wrong in saying that among 20 men between the ages of 40 and 60 years, belonging to legislative assemblies, in noted learned societies, occupying high positions in commerce and finance, and even in the Army, one is sure to find a glycosuric (diabetic).

In other words, 1 in 20, in legislative bodies, scientific bodies, armies, or what not.

Now in our country we have approximately 3 million diabetics. This is an incidence of 1.7. The ratio of total diabetic deaths advanced from half a percent to 3 percent in the last 50 years. This doesn't take into account the diabetic deaths that don't get recorded for one reason or another.

In 1956, diabetes was in 8th place in the list of causes of death in the United States, whereas in 1900 it was 27th. Indeed the Metropolitan Life Insurance Co. places diabetes as the fifth most common cause of death in their industrial premium paying group. Contrast this to what Dr. Joslin found in Boston at the Massachusetts General Hospital. He could only find 172 cases at this hospital during the period 1824 to 1898.

Now as the population of the United States increases, so, too, does the incidence of diabetes. As our life expectancy improves we are obviously going to have more of it.

SCREENING SURVEYS

Now our various screening surveys have been done, you probably know, Senator Hill. We detect anywhere from one-tenth of 1 percent to 8.3 percent new diabetics and it is especially interesting that 89 percent of diabetics are overweight at the onset of their disease if this occurs after the age of 30. That is why a lot of us don't like to see fat people. That is why Dr. Stare doesn't like to see them. That is why he pecks away at it as hard as he does.

DIABETES AND BLINDNESS

In 1957, 18 percent of the newly blinded people in Massachusetts were diabetic; in England, 8 percent, in 1949 and 1950, and 13 percent in 1954 in the 50 to 70 age group. Thus, diabetes is fast becoming the leading cause of blindness. This is truly impressive, especially true of younger people because they are more apt to end blind because they get all of the complications.

This disease hits the nervous system, causes hardening of the arteries and in turn causes stroke and in turn causes heart attack, so this is just an endless chain reaction that goes on.

Now, for instance, if you want to be specific we cite here what a small study that was done in nine Massachusetts hospitals showed. On page 14 you will find what this means in terms of just dollars alone to individuals and to communities.

KIDNEY DISEASE

In diabetes we also see kidney disease for which we have no specific treatment. It has become the leading cause of death among those who are unfortunate enough to acquire their diabetes in childhood or youth. No matter how good our treatment is, it is a very distressing thing. Thus, while the knowledge and treatment to keep an ever-increasing number of diabetics alive and well for 10 or 15 years after the onset of their disease, many are cut down in early life by this dreaded complication about whose development we know practically nothing.

I think this is something we cannot emphasize too much. There is research going on in this field. As you undoubtedly know, we have oral preparations that can be used. This has made it better for a certain percentage number of patients. It also stimulated further research on how insulin acts and how we metabolize sugar. It has also spurred us on to learn more about the pituitary gland and the adrenal gland which play a part in the job of keeping our sugar metabolism going. And so many things have come out of the work done in diabetes, but as I hope I have amply documented here, it has not been without another series of problems which have to be met and as you said, "These things are all related, aren't they?"

Indeed they are. Here I am talking about things that Stare and Mike DeBakey come to talk to you about. We have to go to people like Mike DeBakey to have that same type of operation done on diabetics. That is why we hope Stare is going to be successful in having people keep clean, keep clean arteries and all.

GASTROENTEROLOGY

When it comes to the field of gastroenterology we have got another very impressive situation. Peptic ulcer alone is found in 7 to 12 percent of the American population and still we don't know the cause of it.

Then we have another disease called ulcerative colitis that affects all age groups from infants to old age. Because we know so little about it, the National Institutes of Health called a special conference this last year to see if they could not get more research going on in this field. For instance, we would like to know why these diseases are so common in the United States but rare in countries like China and Japan. There are obviously differences and there must be a reason for it. Something is obviously different in one country as compared to another. If we probe around long enough we ought to be able to get some sort of a lead.

I will not attempt to document all of the diseases that hit the gastrointestinal tract. For instance, here we are in 1959 knowing very little about how foods are absorbed from the gastrointestinal tract. Yet this is essential to all of us if we are going to stay healthy and still it is not well understood. So, thank goodness that with the support we are now receiving work of this sort is being done, so we now begin to get some idea how fat is transported across the intestinal wall into the blood, how much energy this requires, where the energy comes from, what enzymes are involved and then to understand that we can go back and study the ulcerative colitis and the sprue case, and hope that something more can be learned.

LIVER DISEASES INVOLVES SEVERAL CATEGORIES

For instance, in liver disease, as you may well know, people are very apt to go into coma. This alone suggests that the liver supplies something that is essential in the way of nutrition for the brain. And we are only now finding out what these may be. This is but one more example of an area in which much basic research work must be done. If you come to the jaundice of the newborn it is the same business. We know very little about it. Yet if we don't do something about it, the brains of these newly born infants are afflicted so that they cannot grow up normal. If we learn more about bile pigments, how to control them, how to keep them normal, these youngsters will then grow up with a normal brain.

The type of work that I have been speaking about goes on not only at our various medical institutions, medical schools, university hospitals, and elsewhere, but it also goes on out here in Bethesda because they have an excellent group of scientists; they have an excellent record of contributing to medical knowledge.

Of course you can cite any number of diseases where if we are really going to come to grips with it, we will find that it is not just going down one alley.

PORPHYRIA

For instance, the disease that Dr. Cecil Watson is working on out in Minnesota, that we find both in cattle and humans, they have

too much of a substance called porphyrin. Yet it affects skin, it affects brain, it affects any number of systems in the body. Again it doesn't stay in one category. People with this disease called porphyria, they alone serve to emphasize how diseases can go across the categories which we have to establish. In this instance these patients have a blood disease, a metabolic disease, a biochemical disorder, a skin disease, and we know it is due to an inborn disease of metabolism. So if you are going to come to grips with this you have to walk down six roads at one time if you are going to come up with some idea or understanding of what it is all about.

TRAINING PROGRAM

Now the next thing I would like to speak to is the importance of the training program. I will not go into it at length because you know it from its infancy. You know it before it is even born, and you know how much good this program has done both in diabetes, arthritis, gastroenterology, and other areas. The training programs have allowed us to train young doctors, some of whom stay in research, some of whom go to Portland, Maine, or Birmingham, Ala., or somewhere else, and thereby take better care of diabetics or better care of arthritics.

We need funds to train the bright young people. It is costly because they are married. They may have two or three children. They are 4 or 5 years out of school. We have to train them for 3 or 4 or 5 years in a science laboratory and then they come back to the clinic. We need more money for that.

This is sort of another reason why we feel we have to have more money for the year 1960.

Now I think that about covers it, Senator Hill. As I say, we are very pleased about this putting a foot forward in physical biology. We are very excited about it. We think it is going to help us a lot. I think it is obvious that the fullest development in each of these many fields are covered by this one Institute and cannot be accomplished in a few short years as you have already said this morning.

The increase in funds recommended by the Council has taken into account an orderly growth based on the most efficient use of personnel and technique available at the present time.

In closing, I wish to thank you and the members of the committee for the privilege of being allowed to participate in these hearings. I only hope that I have been able to contribute something that will be of help to you in your deliberations and in your recommendation.

I thank you.

Senator HILL. Doctor, we want to thank you. You certainly have made a very fine contribution here this morning, a contribution that will be most helpful to this committee in its effort to get the funds which are needed for this research. You have brought us a very excellent, and I would say a very compelling statement. I would say we appreciate and are deeply grateful to you for it.

There is this about it. As you well know, these diseases about which you have been talking do not dramatize themselves such as a heart disease where a person falls over dead or doesn't wake up in the morning, or such as a torturing death from cancer.

ECONOMIC LOSSES INVOLVED

But as you say, so many, many people suffer from these diseases, they do lead to death and they do involve tremendous economic loss. Isn't that true?

Dr. BAUER. Economic loss and you have tax loss. Also, if it is the wage earner who suffers or if it is the mother this situation holds back two or three children. They may not be able to go ahead with their own career. They may never marry, may never have children because they feel the responsibilities at home, in order to take care of something that goes on for 20, 30, or 40 years.

Senator HILL. You certainly made all that very, very clear, and as I say, we are most grateful to you for this very fine presentation here this morning.

Dr. BAUER. I am grateful to you for your time.

Senator HILL. We deeply appreciate it.

Dr. BAUER. Thank you.

Senator HILL. Now, Dr. Darby, we welcome you here and are glad to have you proceed in your own way, sir.

NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES

STATEMENT OF DR. WILLIAM J. DARBY, PROFESSOR OF BIO-CHEMISTRY AND ASSISTANT PROFESSOR OF MEDICINE, VANDERBILT UNIVERSITY SCHOOL OF MEDICINE, NASHVILLE, TENN.

PREPARED STATEMENT

Dr. DARBY. Thank you, Senator Hill.

It is a privilege indeed to appear before you and your committee to speak in behalf of the research activities of the National Institute of Arthritis and Metabolic Disease.

My name is William J. Darby and I am professor of biochemistry and head of the Department of Biochemistry, director of the Division of Nutrition at Vanderbilt University.

I shall not further identify myself at this moment because I have a prepared statement which I should like to submit for the record.

Senator HILL. Good. We will have that statement appear in full in the record, Doctor.

Dr. DARBY. Thank you.

(The statement referred to follows:)

(Dr. Darby is professor and head of the Department of Biochemistry and director of the Division of Nutrition, Vanderbilt University School of Medicine; president of the American Institute of Nutrition, and vice chairman of the Food and Nutrition Board of the National Research Council.)

Mr. Chairman and members of the committee, I appear before you today to speak on behalf of the research activities of the National Institute of Arthritis and Metabolic Diseases (NIAMD). My name is William J. Darby, and I hold the degrees of doctor of medicine from the University of Arkansas and doctor of philosophy in biochemistry from the University of Michigan. Since 1948 I have been professor and head of the Department of Biochemistry and director of the Division of Nutrition at Vanderbilt University School of Medicine. I am president of the American Institute of Nutrition, one of the six member research organizations of the Federation of American Societies for Experimental Biology,

vice chairman of the Food and Nutrition Board of the National Research Council, chairman of Food Protection Committee of the National Research Council, and member of the Council on Foods and Nutrition of the American Medical Association.

I have had experience in international scientific collaboration, having been a member of the Expert Advisory Panel of the World Health Organization and chairman of the Joint Expert Committee on Nutrition of the World Health Organization and the Food and Agriculture Organization. I serve as chairman of the Protein Advisory Group of the World Health Organization, a group appointed by the Director General of the WHO to advise on the scientific evidence concerning the suitability of proteins of various sources for the feeding of infants and children. Recently I was appointed chairman of the WHO Committee on Research Planning for Nutrition. I am a consultant to the Interdepartmental Committee on Nutrition for National Defense and have participated in their nutrition surveys in Ethiopia and the Philippines and in the planning for the next study in Ecuador.

I am very familiar with the activities of the NIAMD and of the National Institutes of Health as a whole, particularly with regard to the research grant and training area, having been a member of four study sections, the expert consultant bodies which review grant applications. I was a member of the Biochemistry and Nutrition Study Section, and have served as first chairman of the Metabolism and Nutrition Study Section, of the General Medicine Study Section and, now, of the new Nutrition Study Section. For the past 2 years I have served on the Board of Scientific Councilors of NIAMD, which board reviews this Institute's intramural research program. I can assure you that these assignments have provided a most stimulating and rewarding experience as well as greater awareness and understanding of many of the problems which the National Institutes of Health have handled so successfully. I submit that a great program of research and research training in the health and medical sciences has thus been established, both across the Nation and within the walls of the Institutes.

May I say first what a privilege it is to appear before this committee. This committee and its counterpart in the House are well known and honored among scientists in this country for their thoughtful understanding, leadership, and support of research in medicine and in closely related fields. You have been sensitive to the needs for expanded efforts in these fields and have accurately judged the rates at which various aspects of the NIH-sponsored programs of research could respond to and productively utilize the steadily increasing amounts of support which you have provided. This wise action of the Congress has tremendously strengthened our efforts and our abilities to make substantial progress in research for the improvement of man's health.

Scientists applaud not merely the degree of support provided by the Congress but also its kind. The Congress has understood the meaning of fundamental research, and I believe, has sensed correctly that research must be supported not only in depth for basic knowledge underlying applicable fact but also in broad scope for the ultimate conquest of any single disease. The development of a specific curative agent or drug for a particular illness comes rarely from a spasmodic effort in a limited area, but rather is based on the steady accumulation of meaningful fundamental data over a wide front.

We are convinced that the individual investigator, special though his own research may be, will receive a greater stimulus and will more likely find new avenues to explore when he is living and working in an atmosphere of broad scientific understanding. In such an atmosphere whatever discovery or enlightenment may come to him is much more likely to be developed and magnified and, even more important, to have impact on the research of others. Research in the aggregate means the impact of ideas.

Viewing this philosophy of broad support from the other side, we are glad that the committee is aware of the fact that although designation of a quantity of funds for a specific area calls attention to the needs and stimulates work in the area, it brings about no ready purchase of the desired understanding and cure. There is danger, however, that if too much designation is made, it may tend to interfere with the free choice of the scientist to follow his own curiosity toward pertinent fact.

Significance and scope of NIAMD supported research.—I should now like to describe briefly the scope and significance of the research carried on and supported by the National Institute of Arthritis and Metabolic Diseases with particular emphasis on research grant support needs. The significance is probably

best indicated by the fact that the extramural research grant program of this Institute is heavily involved in supporting fundamental research studies. More than 50 percent of the research grant funds awarded during this year have been for "general metabolic studies." These are for study of a tremendous variety of problems in every internal organ and tissue of the body and related to enzymes, hormones, minerals, vitamins, proteins, body fluids, pregnancy, growth and development, and aging.

The scope of NIAMD's activities is indicated by the number and variety of disease categories assigned to it. This Institute is concerned with many of the chronic diseases of medicine, arthritis in its several forms, diabetes, improper function of the endocrine glands, disorders of bone, blood diseases, certain metabolic, genetic, and developmental diseases and disturbances of the liver, stomach and gastrointestinal tract. These diseases are not as great killers of mankind as are some others, but they are great disablers, diseases which interfere markedly with the productive life and happiness of the Nation, both in the home and in the office or factory where the economic loss from these disorders is incalculable.

From the broader international outlook malnutrition with its associated conditions is a major, if not the major, cause of death in early life in most countries outside the United States. Consequently, nutrition, I feel, is deserving of particular attention and increased emphasis. While the nutritional deficiency diseases are particularly important in the developing countries, in the United States and in other more developed countries particular concern is with the nutritional disturbances occurring in metabolic diseases, in hereditary diseases and in degenerative diseases associated with the aging process. Fundamental findings relative to either of these areas contribute to understanding and ultimate development of proper control measures.

It is my feeling that this Institute in its work in Bethesda and the university and medical center investigators supported by research grants from this Institute are exerting a most effective effort against these major health problems. But this effort has to be an expanding one if we are to take full advantage of the progress made. Increasing numbers of investigators have been well trained under NIH training grants and assembled in laboratories and medical centers ready to work on increasing numbers of good projects, research ideas judged worthy of support by unbiased experts in the scientific fields concerned. We ought not to miss these opportunities for increased production of effective research. Again this year worthwhile research proposals approved by study sections and the Advisory Council of this Institute cannot be initiated because of insufficient funds.

From the reports that I have seen, it is evident that the National Institute of Arthritis and Metabolic Diseases is making excellent progress thus far in all of its fields of interest. I have already indicated the preeminent role of fundamental studies of metabolism in the program of this Institute.

The metabolic disease, diabetes, has as always received close attention in proportion to its importance as a serious and widespread disease. In this field great attention has been focused on the new oral drugs which lower blood sugar. Wide-scale clinical testing under the sponsorship of pharmaceutical companies, and the Veterans' Administration as well as through NIAMD support is indicating their value for a special proportion of the Nation's diabetics. The numerous fundamental studies of the mode of action of these drugs has provided insight into the diabetic process and stimulated so much interest in further fundamental carbohydrate and fat metabolism studies that it is conceivable that ultimately their greater contribution may be toward better understanding of the disease rather than toward better clinical care, as welcome and advantageous as that is.

Two new disease areas have received special attention during this past year—the broad field of gastroenterology and the individual disease, cystic fibrosis of the pancreas. Gastroenterology includes many serious diseases, such as peptic ulcer, ulcerative colitis and ileitis, and also is generally considered to include various disorders of the pancreas, gall bladder, and liver. Cystic fibrosis was first described only about 20 years ago. Because of its curious features and chronic disability in childhood, it has caught the attention of the general public as well as of the medical profession. Properly, it should probably be regarded simply as an example of a considerable group of developmental or hereditary diseases which are of growing importance. These in many instances are believed to have as their cause an inherited defect in some crucial, enzymatically controlled, vital chemical (metabolic) process. In both of these disease areas, important research accomplishments have been made, but more significant has been the stimulation they have received in research and training interest; for this purpose special research conferences in both areas have been held within the past year and one-half. The

support of research and research training in gastroenterology, including pancreatic disease, has had a relatively late start. Many very worthy proposals have been and undoubtedly will be submitted to enhance the volume of research in this field, assuming that a corresponding increase of support becomes available. At the same time, it would be highly unfortunate if this increase in support were to be at the expense of increases as well for the other and older fine programs of the Institute, such as arthritis, diabetes, metabolism, endocrinology, hematology, and nutrition, all of which deserve augmented support.

The requests from worthy investigators to this Institute for support of sound research ideas continue to increase at a very rapid rate. Despite the splendid increase voted to this Institute last year, for which this committee was importantly responsible, the National Advisory Arthritis and Metabolic Diseases Council has already recommended for approval 200 research grant applications for which there are no funds. The value of these approved but unpayable worthy investigations amounts to over \$3 million.

NIAMD direct operations and the Interdepartmental Committee on Nutrition for National Defense.—The Institute's laboratories at Bethesda are also heavily involved in fundamental and most important studies. As a member of the Board of Scientific Councilors, I can speak from firsthand information, and I have no hesitation in saying that this Institute has one of the most able group of investigators in this general field to be found anywhere. In my own sphere of interest, nutrition, I feel that the Institute's intramural program is contributing in a major way to our basic understanding of nutritional problems, particularly as related to the degenerative and hereditary diseases. This Institute has a tradition of leadership contribution to the field of nutrition stemming from Dr. Joseph Goldberger, head of a parent laboratory of NIAMD. It was he who clearly demonstrated the deficiency nature of pellagra, a widespread scourge of the South and of other portions of our country during the first four decades of this century. His discovery of the pellagra-preventive vitamin, now known as niacin, was one of the great nutritional advances of the era. Sebrell's later classical studies on riboflavin deficiency continued this great tradition.

Such studies of nutritional deficiency disorders in epidemic proportions are no longer possible within the United States. However, opportunities for American investigators to pursue deficiency studies are afforded by access to areas abroad where nutritional problems are endemic. These opportunities exist through the Interdepartmental Committee on Nutrition for National Defense (ICNND). NIAMD provides an important contribution to the work of ICNND through the Institute's direct operations. This support should be expanded. Although participated in by the Departments of Defense, Agriculture, and State, International Cooperation Administration and Atomic Energy Commission, as well as Health, Education, and Welfare, the staff of the Committee is housed at NIH and is administratively attached to NIAMD. During the 5-year period that the committee has been established, there have been frequent and valuable conferences and discussions between the committee and the staff of the nutrition laboratories of NIAMD.

The principal work of ICNND has been to organize nutritional survey teams of consultant specialists in medicine, dentistry, nutrition, agriculture and food technology which, on invitation of a foreign country, have conducted in cooperation with personnel of the country 90-day surveys of the nutritional status of the population. These surveys have rendered an extremely valuable service in assessing the nutrition of developing countries where nutritional diseases are rampant, appraising the capabilities for improving the health and nutrition, giving technical and other assistance by training host country personnel, furnishing essential laboratory supplies for establishing a permanent medical food and nutrition laboratory, and investigating and conducting research on nutritional deficiencies of prime importance to the world. Surveys thus far in 10 countries have been tremendously effective in pinpointing the major nutritional problems and in making recommendations of both immediate and long-range practical value to the countries. The surveys have served to initiate much research in nutrition. This research affords increased opportunities for investigators from our country to contribute directly and indirectly to important new knowledge.

Tangible evidence of the potent international influence of these surveys lies in the fact that the nations of the Middle East have organized a continuing international committee on nutrition; and Turkey, Iran, and Pakistan have established national nutrition institutes. There has been intense stimulation of the peoples of these countries to work on their medical and nutritional problems, on their

methods of food processing, and even trends in economic planning have been affected.

I believe that enhanced support of ICNND would result in a particularly well-balanced program of nutrition research by NIAMD, which would embrace the Institute's intramural studies of fundamental nutritional and metabolic problems, investigations of the striking clinical deficiency and other nutritional disorders abroad, and its strengthened extramural support of nutrition research by university personnel. The three fields of endeavor are complementary and closely interrelated.

Up to the present time the emphasis of these nutrition surveys has been largely on military aspects with particular attention to the nutritional status of military personnel. The nutrition survey program has received its major financial support through the U.S. mutual assistance program of the International Security Agency of the Department of Defense. The work has, therefore, been restricted to those countries receiving military assistance. The interest of the countries requesting these surveys is increasingly in the results obtained on civilians. Countries not involved in the mutual assistance program have shown a desire to participate in this program. From the research point of view, much more information can be obtained by adding these larger and more diverse civilian groups. The Department of Health, Education, and Welfare, through NIAMD, should be more heavily involved in order to take advantage of these research opportunities. This program is an effective, useful and low-cost one.

These activities, I believe, should be supported by NIAMD because they afford research opportunities to U.S. scientists not possible otherwise. The teams to date have included scientists from 30 American universities as well as from other research centers, including NIH. Since these surveys are executed by teams of investigators from the United States in cooperation with workers of the host countries, they provide unparalleled means for establishing closer inter-country relationships between scientists and for exchange of information. Indeed, this type of nutritional work has, in my experience, engendered the most remarkably favorable degree of interest in and reception by the recipient countries. It has often led to continuing scientific intercourse enabling valuable advances in nutritional knowledge. Research in nutrition will be distinctly advanced by an increase in NIAMD support to the work of ICNND.

NIAMD research support needs.—The National Advisory Arthritis and Metabolic Diseases Council at its recent meeting carefully considered the greatly expanding needs in the Institute's areas of responsibility and estimated the approved requests for research grants and training grants to be anticipated during the coming year. The Council has requested that I submit to this committee the following budget for NIAMD activities during fiscal year 1960:

National Advisory Arthritis and Metabolic Diseases Council recommendations for fiscal year 1960 needs

	1960 President's budget	Council recommen- dations
Grants:		
Research projects.....	\$18, 898, 000	\$34, 700, 000
Research fellowships.....	337, 000	500, 000
Training grants.....	4, 435, 000	7, 500, 000
Total grants.....	23, 670, 000	42, 700, 000
Direct operations:		
Research.....	6, 837, 000	7, 508, 000
Review and approval.....	546, 000	630, 000
Administration.....	162, 000	162, 000
Total, direct operations.....	7, 545, 000	8, 500, 000
Grand total.....	31, 215, 000	51, 200, 000

Training programs (particularly in arthritis, diabetes, and metabolism) begun several years ago are now beginning to produce the desired result: well-trained young investigators capable of formulating good, original research ideas and of planning valid projects which can be expected to produce reliable answers. This development in conjunction with the increasingly important new areas of responsibility accounts for the considerable increase recommended for research grants.

I should like to conclude by stressing again the importance of stimulating and supporting research along many fronts, without undue emphasis on special areas, as the surest road to important breakthroughs in our efforts to provide our people with both longer and healthier lives.

I am grateful to the committee for permitting me to speak in behalf of this outstanding work in which I am so deeply interested.

COLLABORATION IN NUTRITION

Dr. DARBY. I should like, therefore, to merely emphasize a few high points of this statement.

Perhaps I should refer to one or two of my activities in order to indicate the reason for my interest and give some background for this particular statement, however.

I have had a considerable amount of international experience in the field of scientific collaboration, particularly in relation to nutrition. I have worked closely with the international agencies, most especially the World Health Organization, and have served as adviser and panel member and sometimes as chairman of certain of their advisory committees.

I have also served as a consultant for our U.S. Interdepartmental Committee on Nutrition for National Defense since the organization of that committee.

And I have had close relationships with the National Institutes of Health and the National Institute of Arthritis and Metabolic Diseases in particular. Indeed I have served on four study sections, the scientific groups which review the grant applications submitted to the National Institutes of Health. And these have been the study sections on metabolism and nutrition and biochemistry and nutrition and on general medicine and, finally, most recently, the new study section on nutrition.

I have also had the privilege of becoming closely acquainted with the intramural program of this Institute through serving as a member of the Board of Scientific Counselors of the Institute.

I should like to comment at this time, sir, that we should be very proud indeed to view the program of this Institute and the total program of the National Institutes of Health. It is a privilege for those of us, as university scientists, to be associated with this program and have the opportunity to make perhaps small contributions to it.

DISABLING DISEASES

I think it important to grasp briefly the scope and significance in research supported by the National Institutes of Arthritis and Metabolic Disease. I really can add little to the excellent statement given by Dr. Bauer, which so ably illustrated the scope of this program. As he has pointed out clearly to us, this program is largely concerned with a group of diseases which we might term chronic diseases such as arthritis, diabetes, endocrine gland dysfunctions, disorders of the bones, various hereditary and metabolic diseases, a group of diseases in which there often is a genetic origin, hereditary component and which in recent years we have just begun to understand, the so-called inborn errors of metabolism. We might call this group of diseases the great disabling diseases.

Indeed, before your committee last year Dr. Barborka estimated that this group embraces some 40 percent of the attended illness in

the United States. I think this is most impressive, to realize that the area of responsibility for one Institute is so broad as to embrace such a large amount of the practice of medicine.

A major area in my own field, indeed, closely identified with this Institute, is that of nutrition and malnutrition. Diseases of malnutrition, deficiency diseases are disabling and are also killing diseases.

I should like to return to this shortly if I may.

EXPANSION OF RESEARCH

Research on this broad front is expanding in a most encouraging manner. This expansion is largely a result of the production in this country of what we might term a research climate. As Dr. Bauer so ably pointed out, this results from the comprehension of training or the bringing of training to individuals to a stage where they become independent contributors to our knowledge, the provision of centers of work for these individuals. It also results from the remarkable technical advances in science which have occurred, the technical advances at very basic levels, such as physics, chemistry, indeed even mathematics, which can then be applied through such units and new science concepts as those from physical biology.

METABOLIC AND GENETIC FACTORS IN DISEASE

Well, if I may attempt to particularize certain of these broad horizons for research, I think I could do no better than to indicate a few of the advances which have occurred in our understanding of the metabolic and genetic factors in disease. These again I identify for you as the so-called inborn errors of metabolism. Some of these pertain to the metabolism of the group of substances which we know as the carbohydrates, that is, the so-called sugars. They are related to the study of this major disease which Dr. Bauer spoke about, diabetes. They are not diabetes. One of them, galactosemia, is a disease in which there is faulty utilization of the sugar that is present in milk by an infant. This fault is due to a certain enzyme present in the body of these children with this particular disorder, and was demonstrated by scientists working in the National Institute of Arthritis and Metabolic Diseases.

Similarly—well, I should say as a result of this—it is now possible to manage these children and prevent against blindness and other complications of this disease.

Another disorder of much the same sort and which has been elaborated in large part as a result of research support from this Institute is the disorder known as essential pentosuria, a disorder again of carbohydrate metabolism, the understanding of which has contributed to our concept of diabetes and sugar metabolism generally.

METABOLIC NATURE OF LOCALIZED DISEASES

Research in this Institute and work supported by it, in various universities and research centers of this country in recent years have shed light on the general metabolic nature of some of the diseases

which in the past we thought of as being, shall I say, localized diseases or diseases of one system.

For example, cystic fibrosis of the pancreas has been shown to be a disease which affects metabolism of tissues in many parts of the body. Indeed one of the more interesting and impressive comments about this disease which I heard recently in a discussion of it in my own university is that the mothers of afflicted children will tell you that when they kiss their children they taste salty. There is a defect of salt metabolism in these children and by understanding the existence and nature of this defect it has been possible much more ably to manage their disease, and permit them to survive illnesses for longer periods than they might have survived previously.

These are only a few examples in the field of nutrition. There are numerous advances of this general sort which I could cite.

VITAMIN DEFICIENCY CONDITIONS

It was only about 4 or 5 years ago that we began to recognize the nature of some of the deficiency conditions resulting from a lack of some of the newer vitamins. For example, vitamin B-6 or pyrodoxin. We now know a deficiency of this vitamin produces convulsions in infants. We know that it produces certain diseases in the adult. Furthermore, we recognize that in the use of some of the drugs, treatment with certain of them may deplete the body of this vitamin and thereby result in the development of neurological conditions.

I mention these to show you the interrelationship of these various concepts in disease and these are all recent concepts, I would say, which have developed within the past 5 years or so.

Indeed, cystic fibrosis, as you know, was not recognized as a disease entity until about 20 years ago.

Senator HILL. What was the diagnosis of that? What did they call that before?

Dr. DARBY. It was probably lumped in either with respiratory disease, because the children so frequently died in those days of respiratory disease, pneumonia, and so on, or it was lumped in with a group of diseases which by want of another name which we call celiac disease. They were disorders of absorption because these children without pancreatic function would lose a great deal of fat and exhibit malabsorption syndromes.

IMPORTANCE OF TRACE ELEMENTS

Only within the last year or two has the essential nature of one of the trace elements been recognized, that is selenium. This is an element which you may remember in cattle and other animals an excess of it will produce toxic symptoms. We also thought of this as toxic substance. Only very recently has this been recognized to be a factor absolutely necessary but in small amounts for preserving the liver from certain types of injury.

So we are now still finding out a great deal new about nutritional requirements and the methods of meeting these and the interrelations of nutrition and their interplay with metabolic disorders and the so-called chronic diseases.

ADEQUATE FUNDS FOR RESEARCH GRANTS

In order to take advantage of these opportunities adequate funds must be available and I speak here especially to the need for funds for research grants. The National Institutes of Arthritis and Metabolic Disease in 1958 had for this purpose approximately \$11 million. It was a little bit more than this but to give round figures. In 1959 it has budgeted \$18,649,000.

Now, despite this increase between 1958 and 1959 for the budget for this purpose, as you have heard from Dr. Bauer, over 200 desirable research projects have been approved but cannot be activated for the lack of \$3 million. I can attest to the quality of a good many of these applications, because it has been my responsibility to assist in review of them.

Senator HILL. You have screened them, have you not?

Dr. DARBY. Sir?

Senator HILL. You have screened a good many of them?

Dr. DARBY. Yes, sir.

In 1960 clearly it will be essential to meet the ongoing commitments. As you know full well, one of the farsighted aspects of our program of grants for support of research has been to have commitments for continuation of a program so that the investigators felt secure and could plan his work and follow his leads in profitable manners.

Now, we have commitments at the present time which amount to something over \$16 million, and it can be anticipated that within those commitments there will be associated commitments that must be made that amount to better than \$2 million. Clearly, then, we have a total responsible commitment as I see it for something like \$18,600,000, perhaps a little bit more.

Now unless there is a considerable increase above this you can see that there will be no funds whatsoever available for the activation of new research projects, of new research concepts, and we will fail completely to be able to take advantage of the advances which exist today as ideas in the minds of men.

We know further that the amount budgeted by the House will increase the budget to such a point that we would have approximately only \$2 million left for new projects.

Senator HILL. You mean in addition to the \$18 million?

Dr. DARBY. Yes. If we take the committed funds as I have indicated and add to that the \$3 million approved but unpayable grants, we then have something approaching \$22 million which are committed and the House has allotted approximately \$24 million. So this would leave only \$2 million for additional new grants.

Senator HILL. Yes, for research projects?

Dr. DARBY. Right.

AMOUNTS NEEDED

Now we can be certain that based on last year's experience there will be something like \$8 million in approved new research grants, assuming no expansion in the demands over last year. Without further increase above that appropriated by the House, it is obvious that we will not be able to initiate an appreciable amount (about \$6 million) of research grants which are necessary to this vast number of diseases. If this is not available these research opportunities will be lost.

INTERNATIONAL RESEARCH ON NUTRITION

Now I should like briefly further to speak to the subject of research and nutrition because from the broader international outlook, malnutrition with its associated conditions is a major, if not the major cause of death in early life in most countries outside the United States. The nutritional deficiency diseases are especially important in developing countries. In the United States and other more developed countries, particular concern is with the nutritional disturbances associated with metabolic disease such as those that I have just mentioned.

The National Institutes of Health has a tradition of leadership in the field of nutrition which stems from the work of Dr. Joseph Goldberger, who was a pioneer in this field. Dr. Goldberger's work, which was to define deficiency nature of pellagra, is well known to you, sir.

Senator HILL. You know that was a terrible disease in our section of the country.

Dr. DARBY. It certainly was and I can well remember it. It is still today a terrible disease in many parts of the world. I have seen areas in parts of Europe, even Yugoslavia, where there are 30 percent of the people affected with pellagra. Similarly in Egypt, southern Rhodesia, as one goes through Africa, in many of the maize-eating sections of Africa, you find these same diseases or conditions that we observed earlier in the South.

This tradition, of course, was furthered by the classical work of the director of the Institute, Dr. Henry Sebrell, whose classical studies with Dr. Goldberger and then later on riboflavin deficiency continued the interest of this Institute in the field of nutrition.

Therefore, this Institute has a position in this field.

Now studies of nutritional deficiencies in epidemic proportion are no longer possible in the United States because they have disappeared, thank goodness. However, opportunities for American investigators to pursue deficiency disease study is afforded in several areas abroad where these problems continue. These opportunities are particularly afforded through the existence of the Interdepartmental Committee on Nutrition for National Defense, a committee which is housed at the National Institute of Arthritis and Metabolic Disease and into which committee this Institute provides an important contribution through indirect operation.

INTERDEPARTMENTAL COMMITTEE ON NUTRITION

I feel that this support to the Interdepartmental Committee on Nutrition from the National Institute of Arthritis and Metabolic Disease should be expanded.

The principal work of this committee, the Interdepartmental Committee on Nutrition, has been to organize nutrition survey teams of consultants, specialists in medicine, biochemistry, dentistry, nutrition, agricultural, food technology, and so on, and, on the invitation of a foreign country to send these teams into the country to work with national personnel in those countries and to carry out a broad nutrition appraisal and survey of the country and provide the country with a report for guidance and for planning of further nutrition work in that country.

These are examples of the reports which have been provided in Korea, Spain, and Turkey. To date this committee has worked in 10 countries and the latest country was Peru. The countries in which it has worked have included, in addition to those that I mentioned, Pakistan, Iran, Ethiopia, Liberia, the Philippines. We are making a study at present, in fact we will start a study in Ecuador, beginning in July, and then subsequently in Chile.

PRACTICAL DEVELOPMENTS FROM WORK

Now what does this type of work accomplish? Well, in addition to providing the opportunities for investigation, which I have mentioned, which I have already alluded to, it results in very practical developments.

For example, in 1953, a nutrition survey was made of the Korean Army, and it was found at that time that due to the nutritional conditions which existed in the army that from the beginning of recruitment of an individual until 16 weeks of basic training had been completed, that the number of recruits who lost weight so that they fell below 90 percent of standard rate, the number rose from 27 percent to 46 percent and that 6 percent of the troops during this 4-month period, 16-week period, developed nutritional deficiency of such severity that they developed edema or protein deficiency edema.

I could go on with other similar findings in this one survey. There were 60 percent of the new recruits that had vitamin C levels in their blood that was evidence of grossly insufficient vitamin C intake and inadequacy of the diet and by the end of the training period 100 percent. I think you can see what this means for military efficiency. I think you can see what it means for total population efficiency.

Now as a result of the work of this team and the recommendations which it made in 1956, the resurvey was made and there was no longer this weight loss occurring during this interval. No case during this training interval, no case of edema due to protein malnutrition, was found among those troops and indeed all the vitamin C levels were at good, high levels and this same was true for other measurements of nutrition.

FOREIGN NUTRITION INSTITUTES

In other countries, in Iran, for example, Iran, Turkey, and Pakistan, a nutrition institute has been created in each country. These nations and this region have been stimulated to come together and form an international conference on nutrition which meets once a year and which last year invited Libya to participate, another country which has been surveyed by this committee and in which we, the Interdepartmental Committee—I say we—because we feel so close to this committee as a consultant for it, that we have had individuals participating in each of these meetings.

I can assure you that this has been a most important stimulus in development of nutrition research in these countries.

In the recent survey in which we participated in Ethiopia, we found that 2 to 8 percent of the people, the schoolchildren and adults, had eye signs of evident vitamin A deficiency. This is only one of the findings here.

WORK IN ETHIOPIA

As a result of our work a health officer in the Ministry of Health in Ethiopia has undertaken a further study of over 6,000 children, and we received only a few days ago his report.

I think that this is truly thrilling work, because when we realize it is real development—in Ethiopia there are only five physicians, five Ethiopian physicians in the whole country of 20 million people, and this health officer is not a physician in the ordinary sense but is a man who was trained for a period of 3 years after high school in a school which was founded and has been supported to a very considerable extent by our own aid program, a school for training health officers—and then to see this practical result from this additional stimulus of nutrition work, it indicates what can be done both in the way of an application of knowledge and nutrition—application of knowledge which we have—and also the tremendous research opportunities existing.

Now this committee has had personnel from 30 universities participate in its activities. These are all graduate-level people. These universities range from Florida to Oregon, from Galveston, Tex., to New York.

Again, the opportunity here for exchange of information, for getting new concepts for research is tremendous, although, as indicated in my prepared testimony, total support for this project comes from various Government agencies.

I submit enlarged support for the Interdepartmental Committee of Nutrition from the National Institutes would result in a well-balanced program of research on nutrition within this Institute because the Institute at present has its intramural program on nutrition and metabolic programs. It would then have a program for clinical deficiencies and other nutritional disorders abroad.

COST OF WORK

This program of which I speak is not a costly program; it is not one which runs into vast sums of money; that is, this program of the interdepartmental committee. What is really needed is additional support here to permit exploitation and assistance, greater assistance, at the civilian level. What is really needed is a sum like \$150,000 for the coming year, which is really very small compared to the tremendous benefit of such work and the tremendous opportunities which it opens to us.

I am very grateful, indeed, sir, to you and to your committee for allowing me to appear and present my views on these matters. I think you can sense that I have a very deep interest in them.

I should also like to thank you in behalf not only of myself and of the other scientists interested in this program and who receive support for doing the work which they feel will make a contribution to science and to medicine, but I should like to thank you for those who will benefit from this research which you and your committee in its wisdom have made possible through provision of support throughout these last numbers of years.

Senator HILL. Doctor, as I said earlier, I am sure Senator Smith agrees with me, anything we have been able to do has been made

possible by the very fine contributions we have had from men like you who brought us the facts, the information, and who have given us the inspiration to carry on.

Senator Smith, any questions?

Senator SMITH. No.

Senator HILL. Doctor, I want you to know we are deeply grateful to you. You certainly maintained the high standard of Dr. Bauer in his testimony and you are most informative and most helpful. You have brought us some excellent statements and we deeply appreciate this. We want to thank you very, very much.

Dr. DARBY. Thank you very much.

ROCKY MOUNTAIN LABORATORY IN MONTANA

Senator HILL. When Dr. Shannon, Director of the National Institutes of Health, appeared before the committee and testified with respect to the need for a building to house experimental animals at the Rocky Mountain Laboratory, in Montana, I referred to a letter which I had received from Senator Mansfield on this subject. Senator Mansfield's letter will appear at this point in the record.

(The letter referred to follows:)

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
April 29, 1959.

HON. LISTER HILL,
*Chairman, Subcommittee on Health, Education, and Welfare Appropriations,
Senate Committee on Labor and Public Welfare, U.S. Senate, Washington, D.C.*

DEAR MR. CHAIRMAN: Attached is a copy of a letter Senator Murray and I have just sent to the Secretary of the Department of Health, Education, and Welfare concerning the disallowance of a construction item of \$150,000 for a proposed animal production building at the Rocky Mountain Laboratory at Hamilton, Mont.

The Montana congressional delegation is extremely concerned due to the fact that this facility is needed and in addition it is an item which the administration itself requested funds for when they submitted their budget, but now they have failed to present substantiating evidence. Your cooperation in restoring these funds will be most appreciated.

Thanking you and with best personal wishes, I am

Sincerely yours,

MIKE MANSFIELD.

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
April 29, 1959.

HON. ARTHUR S. FLEMMING,
*Secretary, Department of Health, Education, and Welfare,
Washington, D.C.*

DEAR MR. FLEMMING: When the budget for fiscal year 1960 was submitted to Congress for the Department of Health, Education, and Welfare, it contained a construction item (\$150,000) for a proposed animal production building at the Rocky Mountain Laboratory at Hamilton, Mont.

At the time we and our colleague from Montana's western district, Lee Metcalf, in the House of Representatives, were very pleased at the action taken by your Department as we have urged such a unit at the Hamilton Laboratory for some time now. We were indeed disappointed to learn this week that the House Committee on Appropriations had disallowed this item. We quote to you the following paragraph taken from the report on the appropriations bill for the Department of Health, Education, and Welfare, 1960:

"Construction of animal quarters at Hamilton, Mont. The committee has disallowed \$150,000 requested for this item. There was no explanation for the reason of the administration deviating from its construction policy with regard to this

item which was considered in connection with the bill for 1959, but which was deleted by the House-Senate conference committee."

We are concerned because this item was apparently deleted due to the lack of sufficient supporting evidence from your Department. This seems rather unusual since this item was requested in the Department's budget. Earlier this year in a report to the Hamilton Chamber of Commerce the Director of the National Institute of Allergy and Infectious Diseases reaffirmed the fact that:

"The need for an adequate animal production building for the Laboratory is fully recognized. The acquisition of this facility should contribute materially to the effectiveness of the research studies which in recent years have become increasingly dependent upon an adequate supply of experimental animals."

Now we find in the context of the printed hearing on the Health, Education, and Welfare appropriations bill that when questioned about this project, you were not in a position to present supporting testimony. We respectfully direct your attention to a statement made on page 902 of the printed hearing dated April 9, 1959. The chairman of this subcommittee, Hon. John Fogarty, who stated as follows:

"The Secretary seemed surprised to find that this item was in the bill at all when he was before us. He did not know anything about it. He was going to look into it."

In view of these contradictory statements, we sincerely hope that you will be in a position to present favorable and supporting testimony in behalf of this construction item when you and your associates appear before the Senate Committee on Appropriations.

The need for this animal production building is well documented and must have support within your Department in view of the fact that it was included in the administration's program for the next fiscal year. We hope that you will be able to make a forceful presentation so that this item might be restored.

We wish to emphasize our deep interest in this matter and hope to hear from you at an early date.

Thanking you and with best personal wishes, I am,

Sincerely yours,

JAMES E. MURRAY,
U.S. Senator.

MIKE MANSFIELD,
U.S. Senator.

INTRODUCTION OF WITNESSES

Senator HILL. Now, Mr. David C. Crockett and Dr. W. Barry Wood, Jr., and Dr. Harry Alexander.

Have seats, gentlemen.

Mr. CROCKETT. We are very pleased to be here, Senator Hill, sir, and I will introduce, as I did last year, the two other speakers and then I will give you a little financial statement at the end of this testimony.

Senator Hill. All right, good. You may proceed in your own way, sir.

Mr. CROCKETT. On my immediate right is Dr. Harry Alexander, who appeared before you last year.

Senator HILL. We recall Dr. Alexander, and welcome him back this year.

Dr. ALEXANDER. Thank you.

Mr. CROCKETT. He was 20 years editor of the Journal on Allergy and professor emeritus at Washington University. He is a noted allergist and will speak on that subject.

And Dr. Barry W. Wood, on the extreme right, is professor of microbiology, Johns Hopkins and formerly vice president of Johns Hopkins in charge of medical affairs.

He will speak on the infectious disease phase of our institute.

Senator HILL. Good.

Mr. CROCKETT. And some other subjects.

Senator HILL. Good.

We are glad to have you gentlemen here. We appreciate your presence and now Dr. Alexander, we will be glad to hear from you, sir.

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

STATEMENT OF DR. HARRY L. ALEXANDER, EMERITUS PROFESSOR OF CLINICAL MEDICINE, WASHINGTON UNIVERSITY MEDICAL SCHOOL, ST. LOUIS, AND MEMBER OF THE ADVISORY COUNCIL OF THE NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

PREPARED STATEMENT

Dr. ALEXANDER. Senator Hill, it is gratifying to be here again and be able to testify before your committee.

As you know, allergy is a relative——

Senator HILL. Excuse me, Doctor. We will have your statement appear in full in the record.

Dr. ALEXANDER. Yes.

(The statement referred to follows:)

Last year, in appearing before the Senate Appropriations Subcommittee, members of the Advisory Council of the National Institute of Allergy and Infectious Diseases and others, presented reasons for support of the programs of this Institute. Since allergy and infectious diseases cover such a large area of medicine, it seemed more convenient then, as well as now, to state the needs of each of these separately. This method of presentation, however, is somewhat artificial since the two are closely integrated, and budgetwise, there is no separation.

Before a request is made for further support of an expanding program in allergy, it may be well to take stock of what has been accomplished in this field during the 3 years that this Institute has been in existence. This may be summed up by stating that due directly to the programs of the Institute, more progress in allergy has been made than during any similar period of time. This fact is attributed to two specific contributions, namely, the training grants program and support for basic research.

The training grants program converted the study of allergy from a neglected branch of medicine to an important one. For some 30 years after allergy was recognized as a disease of man, emphasis was placed largely on its clinical manifestations. It took these years to sort out and test the numerous theories that implicated allergy in a wide variety of symptoms, to develop proper methods of testing, and to try different forms of treatment. Most younger men who were attracted to this specialty became concerned largely with its common clinical aspects such as asthma and hay fever.

Those interested more in the scientific attitudes of medicine soon became aware that allergy has a far wider application. For example, it plays an important role in infectious diseases. In many of these the intensity of symptoms is related to the degree of sensitivity to the invading organism. The tuberculin skin test, for instance, measures how allergic an individual is to the products of the tubercle bacillus rather than to the size of the lesion. Allergy participates in other bacterial diseases, as well as in virus infections and those due to fungi and higher forms of life. It is closely related to immunology, a branch of medicine that concerns the mechanisms by which resistance to infection is brought about, as well as those that, in part, produce allergic reactions. Allergy is responsible for certain blood disorders and it underlies many symptoms produced by drugs. Recently, immunological mechanisms have been found to influence the rejection of transplanted grafts of skin and other tissues from one individual to another. There are other known aspects of allergy and there are some diseases of unknown causation in which allergy is suspected.

This comprehensive subject requires long training to master it. But a few years ago, in the teaching curricula of very few medical schools in the country was allergy placed on a par with cardiology, infectious diseases and other obviously important branches of medicine. There was a lack of qualified teachers and few places where they could be trained.

The announcement that funds for such training had been allotted by the Congress, met with immediate response from many schools, including some of the most prominent. Programs have been set up whereby a trainee in a given school has the opportunity to study allergy in its many aspects and to do research. Instruction is provided by mobilizing available talent. As this program progresses, a reorientation of the teaching of allergy is taking place, according to the current concepts of it. This is a logical approach and leads to much better clinical practice.

Training grants were soon used up the first year, the increased appropriations for this fiscal year have been exhausted, and there remains a backlog of unpaid approved applications. This situation indicates the soundness with which the training programs are looked upon. As other disciplines also expand, the need for training grants increases. This fact is reflected in the substantial appropriations requested in next year's budget. Since this money is designated for the education of selected scientists, it should be a sound investment. The same holds true for funds applied to fellowships.

The designation of allergy as a major interest of the National Institutes of Health attracted the attention of many investigators. New ideas and new techniques have already contributed to substantial progress. The importance of the relationship of basic research to clinical medicine is exemplified by the fact that there is no effective way known to prevent the symptoms of allergy which affect many millions of people, excepting by the continuous use of drugs. Little is understood of the complex processes within the body that induce allergic reactions. Basic knowledge was utilized, however, when it was discovered that a chemical substance, histamine, participates in these reactions and is an essential part of them. This led to the production of the important antihistamine drugs which are so widely used.

In addition to research, training and fellowships supported by extramural grants, significant work in basic investigation in allergy and immunology is being conducted through the intramural program. Moreover, the Advisory Council has been actively engaged in promoting projects in allergy that have wide applications to public health.

These activities have attracted many more applications for research than can be paid. Allergy is not an exception, but adds to the total backlog of approved grants that continues to increase. This is a disturbing situation. It discourages investigators and adds to the general apprehension that as the medical sciences continue to expand, the need for trained scientists capable of doing competent investigation will not be filled unless every support is given them. Moreover, progress in research is retarded in that many of the unpaid applications contain important ideas.

The Advisory Council in taking final action for payment of all applications, has been careful in providing that money available has been well spent. It is acutely aware of the implications of the present financial inadequacy to support sound programs. With this in mind, the budget recommended by the Council has been carefully prepared, and the substantial increase in appropriations that is requested, is no more than a conservative estimate.

PROBLEM OF ALLERGY

Senator HILL. You proceed now in your own way, sir.

Dr. ALEXANDER. The National Institute of Allergy and Infectious Diseases is a relative newcomer to the National Institutes of Health. During the 3 years since it became one of the NIH interests, this Institute has taken much interest in various problems that concern allergy. One of the more important of these is the expansion of allergy which it has been doing for many years in terms of more and more people that are acquiring it.

This is due primarily to the fact that we are being constantly exposed to new substances which are so constituted that they may cause allergy.

ORIGINS OF VARIOUS ALLERGIES

Of the many new drugs that have been introduced there are several of these that fall into this category. Unfortunately, these include

some of the most important ones, penicillin and the so-called sulfa drugs. When these are given repeatedly to large segments of the population more cases of allergy appear. The same thing holds true in industry. As new substances are manufactured that may cause allergy of workers who handle them, or breathe in their dust, they add also to the total number of cases of allergy.

Insects may spread allergy and many of them do. One of the projects we are supporting has been an invasion of the South, Senator Hill, and I think Alabama is included, of a creature known as the South American fire ant.

Senator HILL. Yes, we have it, I am sorry to say, Doctor.

Dr. ALEXANDER. And this is spreading and when man is bitten he may become allergic to the venom. When he is attacked again he develops symptoms of allergy, local skin eruptions, and asthma, and sometimes more serious symptoms.

PERCENTAGE OF POPULATION AFFECTED

With these constant additions it is not known what the occurrence of allergy is in this country. Some 10 years ago, really as a result of a survey, it was established that 10 percent of the population were affected but with an increase in the population and with these new sources of allergy, it is now conservatively estimated that the annual occurrence of active cases of allergy is well over 20 million.

Now, in most of these instances the symptoms are transient and temporarily uncomfortable, but there is an undetermined percentage in which they are serious. There are reactions caused by certain drugs, which may seriously impair the liver, and now the tranquilizing drugs are included in this. Some of the so-called sulfa drugs occasionally may destroy the artery and there are many deaths that occur immediately after injection of penicillin.

ASTHMA

Bronchial asthma is a serious disease and for some unknown reason there has been an increase in the number of deaths in this disease in several countries during the last decade.

Asthma also ranges high in the table of vital statistics that are concerned with the more disabling illnesses.

Industrial allergies, which account for about 7 percent of all cases, can be effectively treated only by separating the worker from the job.

There is no effective way now known of stopping this progression. The only hope of doing so is to acquire more basic knowledge of allergy and the very complex processes of the body that bring these symptoms about.

The Institute is supporting several research grants in this area and progress is being made, but it is slow.

TRAINING GRANTS PROGRAM

On the other hand, one of the more successful activities has been the training grants program. Before this was initiated, some 2 years ago, there were only 10 medical schools in the country that treated allergy other than as a minor specialty. This is due particularly to the fact that there were very few qualified teachers and there were

very few places in the country where one could get good basic and comprehensive training in allergy. For allergy covers a wide area of medicine besides the conventional situation of asthma, hay fever, and eruptions. It is closely identified with immunology and participates in the symptomatology of infectious and other diseases.

Now, it was this lack of opportunity for training which accounted for the fact that so few graduates entered this field and it was also responsible, really to a great extent, for the establishment of the training grants program of this Institute.

In these 2 years, 30 medical schools have applied for training grants in allergy and immunology in order to train, support, or have support for the establishment of good graduate teaching.

As these trainees graduate they will help transform allergy into a more important level of academic medical instruction, and so practice will be improved.

NEED FOR QUALIFIED PERSONNEL

Now, other disciplines and subjects with which this Institute is concerned also are in need of qualified graduates. This, of course, holds true as the medical sciences expand. We realize the amount of appropriations asked for next year is substantially greater than that of this year. We are really committed to the importance of this program for it is these trainees or many of them who will be so badly needed as appropriations for research in these medical sciences expand.

RESEARCH GRANT EXPERIENCE

As far as the research grants are concerned, and allergies are in the same position as infectious diseases and other comparable subject situations in other institutes, there is a backlog of applications approved by the study groups that remain unpaid for lack of funds.

Now, a single project may be very costly in time and money. One example which is unusual but in which we are very much interested concerns the standardization of pollen extracts. The best way to treat hay fever is to inject extracts of the pollen that causes it, and this treatment is widely used among the 5 or 6 million people with hay fever. However, in order to arrive at a proper dosage and to prevent reactions it is important that these extracts be standardized with some accuracy. This is something that has never been accomplished. Although many investigators have worked on it over 30 years, still there is no accurate way to standardize these extracts. The reason for this is that the essential substance that causes hay fever is carried within the pollen and it has never been isolated or identified.

The same situation holds for other extracts that are injected for the treatment of allergy.

This problem is so important that last year the Advisory Council assembled a committee of outstanding experts to reevaluate it. This committee is now working very actively on it; certain leads have developed and there is now hope for a breakthrough in this area. Programs of this Institute have been responsible for a good deal of the progress in allergy in the last few years and the potentialities for future development are very great.

It is most unfortunate when progress is interrupted because of lack of funds. This has been the situation certainly since I have been on the Council in the last 2 years.

However, allergy is not a special case and those of us on the Council are interested in overall program. Accordingly, we believe that the very carefully prepared estimates which Mr. Crockett will give are realistic and they are conservative. We are here to support them in any way we believe we might.

Thank you, Senator Hill, for permitting me to present this testimony.

Senator HILL. That is very fine of you, Doctor. We appreciate it very deeply.

Any question this time, Senator Smith?

Senator SMITH. No.

Senator HILL. Dr. Wood next, Mr. Crockett?

Mr. CROCKETT. Yes.

Senator HILL. Dr. Wood.

OVERHEAD ALLOWANCE ON RESEARCH GRANTS

STATEMENT OF DR. W. BARRY WOOD, JR., PROFESSOR OF MICROBIOLOGY, JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE AND SCHOOL OF HYGIENE AND PUBLIC HEALTH, BALTIMORE

GENERAL STATEMENT

Senator HILL. You may proceed in your own way, Doctor.

Dr. WOOD. Senator Hill, Senator Smith, I would like to begin by referring to a general problem that has to do with the overall research program of the National Institutes of Health.

This is a problem that has been before this committee previously. I have considered it with Senator Hill. As one who has been connected with the administrative activities in one of the universities in this country, I still have this problem very much on my mind. I would like to begin by talking about it.

Senator HILL. All right, sir.

Dr. WOOD. I am disappointed in the fact that Mr. Fogarty's committee in the House has failed to recommend positive action in relation to the overhead allowance on research grants. This, in my opinion, is a serious omission. And in testifying before Mr. Fogarty's committee I last month emphasized that the overhead allowance of 15 percent does not meet the full and direct cost of research.

As a result, as all know who are connected directly with the university administration, each research grant accepted by the university drains additional dollars from the educational budget. If this trend is allowed to continue as the research grant program increases in magnitude there can be but one result, naturally, which is that the universities from which the scientific manpower of the future must come will be forced into greater financial difficulties.

I realize that this committee has had the overhead question before it previously and has recommended that there be a change. However, each time that that recommendation has been made it has been disallowed. The argument has been advanced that to increase the overhead would in reality constitute the granting of funds to support education under the guise of supporting research.

Admittedly, as I tried to emphasize before Mr. Fogarty's committee, funds appropriated by Congress for research should not be used to support education. Nor, however, should they be used to undermine it. Yet in the opinion of many university administrators this is precisely what research grants program is now doing.

CIRCULAR A-II OF BUDGET BUREAU

I would like to illustrate. On September 10, 1958, the Bureau of the Budget issued so-called Circular A-21 which, and I quote— provides the basis for a uniform approach for problems of cost in research and development performed by educational institutions under grants from and contracts with the Federal Government.

Senator HILL. That certainly came as a result of a study they made, too; did it not, Doctor?

Dr. WOOD. Correct.

Senator HILL. They had a study made of this whole subject?

Dr. WOOD. The Bureau after issuing this Circular A-21 requested that the principles and related policy guides explicitly set forth in it be followed by all Federal agencies that sponsor research and developmental work at educational institutions. Since its issuance, the circular has been adopted by the Atomic Energy Commission and on November 10, 1958, it was incorporated into section 15 of the Armed Services Procurement Regulations.

Several months ago the financial officers of the Johns Hopkins University applied Circular A-21 to the calculation of overhead on all research grants and contracts which the university is now receiving from the Federal Government. The results were as follows, and I think they are of considerable interest.

When calculated by the Budget Bureau's A-21 formula the overhead rate on NIH grants in medical schools, Johns Hopkins Medical School came to 27 percent rather than the 15 percent. That in the School of Hygiene and Public Health came to 22 percent rather than 15 percent. That fact in itself illustrates that overhead rates may be different in different institutions.

EXAMPLE OF INEQUITIES

The total increase in overhead payments which would accrue to Johns Hopkins University from application of the A-21 formula to all grants and contracts from the Government was found to exceed \$300,000 a year. In other words, the university is now spending the income on roughly \$8 million of its endowment to pay cost which according to the Bureau of the Budget should be borne by the Federal granting agencies.

This situation obviously is not peculiar to Johns Hopkins. It obtains in many other universities which are heavily involved in governmental research.

AMENDMENT RECOMMENDED

It is for this reason that I would strongly urge the committee again to recommend to the Congress that the present restricted legislation dealing with overhead allowances on research grants from the National Institutes of Health be amended. It seems to me it should be amended so as to allow grants to institutions either (1) to be paid in overhead

allowance of approximately 25 percent or (2) to negotiate with the National Institutes of Health an overhead rate calculated in accordance with the explicit directions set forth in Circular A-21.

If, in the opinion of the committee, the cost of this change would be too great to absorb in a single year's budget, I would suggest that the revised rates be applied only to new grants after the beginning of the next fiscal year:

Failure of the Congress to make at least this provision can only result in a perpetuation of inequity which has already made serious inroads into educational budgets of American universities.

Now, having gotten this off my chest, Senator Hill, I would like to come back to the Allergy and Infectious Diseases Institute and the matter of the appropriation bill.

APPROVAL OF HOUSE INCREASES

I would like, first of all, to express my own general approval of the substantial increases in the appropriations which have been recommended by the House for the research grant program of the National Institutes of Health in general. These increases seem to me as a citizen, as a physician, amply justified, not only by the fact that the cost of scientific research is steadily rising, as the cost of so many other things, but also by the continuing need to expand and strengthen the medical research efforts of the Nation.

NEED FOR ADDITIONAL FUNDS

In the Allergy and Infectious Diseases Institute, as will be, I am sure, made very clear by Mr. Crockett in a moment, there is pressing need for additional funds, particularly for training grants and also for extramural research.

It is not necessary for me to emphasize to you, Senator Hill, the importance of the work that goes on in this particular Institute. You are familiar with this. I would only touch quickly upon one or two segments of the work.

Yesterday, testimony had to do primarily with the cancer problem. And there is no doubt in my mind, or many other scientists, that many of the answers in the cancer field are going to come from virology, and virology is a part of the Allergy and Infectious Disease Institute, a very important part.

STAPHYLOCOCCUS PROBLEM

I might also mention the staphylococcus problem because this committee recommended last year a sizable appropriation of a million dollars to tackle this very vexing problem.

Senator HILL. That is a pretty serious problem today, isn't it?

Dr. WOOD. It is an extremely serious problem, Senator Hill and I can only say in terms of progress made that there has been progress made during the past year partly as a result of these grants, but the progress is slow. This is a problem that is not going to be solved overnight. I think it is fair to say that we understand today more about the way the staphylococcus behaves in the body and produces disease than we did a year ago.

INFECTIOUS HEPATITIS

Lastly, I would just point out that Dr. Bauer a moment ago talked about the liver. Senator Hill reminded Dr. Bauer properly that infectious hepatitis is a disease of the liver and infectious hepatitis is one of the very important diseases being studied intensively in the Infectious Disease and Allergy Division. This again is an extremely difficult problem but progress is being made in this field and I have no doubt that in the very near future this disease also will be brought under better control.

Thank you very much, Senator Hill.

Senator HILL. Thank you, Doctor, very, very much.

I picked up my hometown paper here just 3 or 4 days ago, and I saw where the fine hospital at the Air University at Maxwell Field—and Maxwell Field happens to be at my home in Montgomery, Ala.—they are closing down that hospital because of this very staphylococcus infection that you are speaking about, showing how serious the situation is. And I know in other parts of the country it is even more serious than it has proved to be down in our section.

All right, Mr. Crockett.

Mr. CROCKETT. It is a pleasure to be here, sir. We are all three of us members of the Allergy and Infectious Disease Council. I am a lay member.

I speak to you really as a businessman and will review only the budget and not really qualified to discuss scientific aspects.

Senator HILL. Mr. Crockett, if you will excuse me, I know you are associate director of resources development, Massachusetts General Hospital, and you say you are a businessman. I take it that if you were in the Armed Forces—Senator Smith here is a very prominent member of the Armed Services Committee—I guess you would be called the quartermaster general, to get the wherewithal.

Mr. CROCKETT. Quartermaster general for dollars, sir.

Senator HILL. That is what I mean. What we are talking about now is the dollars. They constitute the munitions, the weapons, the shells, and missiles, is that right?

Mr. CROCKETT. Definitely, sir, definitely.

I am sorry to say that both Dr. Alexander and I are retiring from the Council this year so we probably won't appear before you next year, so this is our swan song.

I just want to point out—call your attention to my official statement, sir, and to the coverage sheet, which outlines the budget analysis that we have made in the Citizens Committee of this Institute.

COUNCIL'S BUDGET ANALYSIS

Whereas the House has treated us very generously in upping the total from the Bureau of the Budget recommendation of \$24 million plus to \$30 million plus, the Citizens Committee feels strongly that \$41 million, the total for the Allergy and Infectious Diseases Institute is a more realistic figure than the other two figures that I have just quoted.

Now, I want to call your attention to the breakdown of these figures.

You will see that in the extramural research grants section we requested \$27 million as against \$19 million recommended by the

House and in the fellowship research fellowships \$866,000 is recommended by the House bill, and we think we need \$1,250,000. This is on the basis of careful analysis of the applications we have before us. And in the training grants section last year we received \$1,787,000, the House bill provides for \$2,621,000, but we see the need for \$5 million.

I would justify that in just a minute.

In the final column there, the intramural program, a very interesting thing has happened here. The House Appropriations Committee gave more for this section than the Citizens' Committee recommended, but I was under a misapprehension and my calculations were off by nearly a million dollars, because I didn't take into account the central management fund requirements which accounts for the difference between our total in the House and the total that we now present here.

But there are two aspects in particular that I wanted to spell out in a little greater detail and summarizing the prepared statement. That is on the need for funds in the extramural grants division and the training grants program.

EXTRAMURAL RESEARCH GRANTS

We can see on the basis of applications which we have approved even in our March Council meeting which total \$340,000-plus and those which are coming before us amounting to \$717,948, for payment for 1960 funds, that \$19,136,000 which is recommended by the House bill will be about gone and we will only allow a margin of about \$5 million for new grants in 1960. This is barely enough to meet the anticipated group applications and consequently the Citizens' Committee has recommended that we have \$27 million available rather than the \$19 million recommended in the House bill.

Senator HILL. That is your extramural research grants?

Dr. WOOD. That is extramural research grants.

The fellowship requirements are pretty well stated in my prepared statement, sir, and I will not go into this.

NATIONAL ALLERGY AND INFECTIOUS DISEASES ADVISORY COUNCIL

STATEMENT OF DAVID C. CROCKETT, ASSOCIATE DIRECTOR FOR RESOURCES AND DEVELOPMENT, MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MASS.

PREPARED STATEMENT

Senator HILL. Your prepared statement will be in full in the record, Mr. Crockett.

(The statement referred to follows:)

This year the Citizens' Committee for the Allergy and Infectious Diseases Institute has met on several occasions and has come up with the following financial needs of the Institute for fiscal year 1960. Because the Bureau of the Budget has recommended the identical amount for fiscal year 1960 as it did for fiscal 1959 and even with the increases allowed in the House bill, the Institute is faced with the strong possibility of not having funds available to initiate many important new projects next year. In the light of these recommendations the Citizens' Committee recommends a total of \$41 million for the Allergy and Infectious Diseases Institute for fiscal year 1960. The item for extramural research grants

on the Citizens' Committee recommendation will allow for increased payment of overhead up to 25 percent. To summarize our recommendations I have included a table as appendix I to this statement.

To summarize expenditures for fiscal year 1959 and to further point up the need for \$41 million I would like to review the action of the Advisory Council of this Institute.

The Advisory Council of the Institute at its meeting on March 2-3, 1959, recommended to the Surgeon General for payment all staphylococcal projects totaling \$398,826; all cystic fibrosis projects totaling \$76,171; all small grants totaling \$31,693; all continuations with a beginning date in fiscal year 1959 totaling \$29,647 as well as new and supplemental requests with very high priorities. These totaled \$340,798.

The Council further recommended payment of all new and supplemental applications, again those with high priorities, totaling \$50,510; and that all continuations with a requested beginning date in 1960 totaling \$717,948 be committed for payment from 1960 funds.

The commitments from 1960 funds, therefore, are increased to \$12,919,926: an additional \$950,000 has to be reserved for continuations that have not yet been reviewed by the Council and which terminate sometime during fiscal year 1960. The result is that after adding together all these commitments for expenditures and based on an appropriation of \$19,136,000 recommended in the House bill, the balance available for fiscal year 1960 for new research grants is only \$5,267,074. This is barely enough to meet the anticipated approved applications.

The extramural research program of the Institute will be seriously jeopardized if we fail to get a sizable increase in this section of the budget. If you will refer to the chart you will see that the Citizens' Committee urges you to recommend \$27 million for extramural grants for fiscal year 1960.

With reference to research fellowships, the appropriation for fiscal year 1959 was \$866,000; however, a program reserve reduced the operating budget to \$605,000. By March 1959, review panels had recommended awards using this entire budget. As of March 16, a total of 157 applications had been received, of which 42 were pending review by the Board. In order to allow for reasonable expansion of the fellowship program in fiscal year 1960, the Citizens' Committee recommends \$1,250,000 for fellowships for fiscal year 1960.

The training grant appropriation for fiscal year 1959 was \$1,787,000. Prior to the March meeting, the Council had recommended for payment or encumbered 69 grants for a total of \$1,581,527, leaving a balance of \$205,473. Accordingly, because of limited funds, it was possible at that time to pay only three approved applications of the highest priority.

The sum of \$1,748,989 is already committed against 1960 funds. The Training Grants Committee has recommended to the Advisory Council grants amounting to \$834,155 for approval in June (including only applications held over from the March meeting). Reserves for chairman's grant and institutionwide salary increases, etc., amount to \$50,000; thus, we have a total of \$2,633,144 already committed or reserved for training grants against 1960 funds.

The 1960 House allowance provides an increase of \$834,000 for training grants which, added to \$1,787,000, the amount recommended by the Department of HEW and the Bureau of the Budget, makes \$2,621,000 available for 1960. Thus, the Institute will be starting 1960 with less House allowance money than existing training grant commitments and reservations for fiscal year 1960. The training grants program is now only in its second year and its growth has been carefully watched by the Training Grants Committee and the Council. Therefore, approved applications which have been awarded have been in the category of high-quality training programs. But if the present budget stands for next year, even with the increase recommended in the House bill, no new applications will be apid beyond those already recommended. There may well be a carryover of approved training grants from the June Council that will also have to be turned down.

The Citizens' Committee feels that the future effectiveness of the extramural and intramural programs depends on the strength of the number of available trained research workers. The training grant program is designed to accomplish this and more funds must be made available for fiscal year 1960, consequently the Citizens' Committee recommends \$5 million for training grants.

The intramural research program had available \$4,418,000 for fiscal year 1959 and the same figure has been requested by the administration and the Bureau of the Budget for fiscal year 1960. The House has allowed \$7,095,000 and the Citizens' Committee is pleased that the House bill provides more than they requested as they have the greatest confidence in the Director of the intramural program

of the Institute. There is great need for the expansion of the vaccine development and evaluation program which is being carried on at the Rocky Mountain Laboratory. Much important basic research is underway and more could be done with additional funds in the House bill.

Unfortunately the House Appropriation Committee recommended the elimination of an item of \$150,000 for the construction of animal quarters at Hamilton, Mont. The Citizens' Committee would like to see this figure restored. I would like to include in the record excerpts from a special report on the Rocky Mountain Laboratory.

The Rocky Mountain Laboratory of the National Institute of Allergy and Infectious Diseases, established to study and bring under control the spotted fever which in the early years of the century plagued the Rocky Mountain area, continues to fulfill its responsibilities to the western region of the United States. It is a world center for research on rickettsial diseases including Q-fever; for work on Colorado tick fever which is important to the health of the people of the Western States; and for work on mosquito-borne diseases, such as western equine encephalitis, which are serious diseases that threaten both man and domestic animals.

The Hamilton, Mont., researchers are in a strategic position with regard to a number of fungus infections, including some that thrive in dry climate, such as the agent of coccidioidomycosis, which causes influenzalike symptoms and may result in lesions of the lung resembling those of tuberculosis. Histoplasmosis and other fungi are also under investigation.

Control of these, and indeed many diseases, rests on knowledge of ecology, epidemiology, pathogenesis and immunology. Such knowledge can only be obtained from studies made in the region where a particular disease is prevalent. Examples of how the Rocky Mountain Laboratory scientists have contributed and are contributing to such fundamental knowledge can be found both in the laboratory's original achievement in conquering Rocky Mountain spotted fever and in current studies on Q-fever, Colorado tick fever, and the fungal diseases of the Western States.

Corollary to such studies are others now underway which have their goal development of effective vaccines for prevention of infections in man and his domestic animals, or of better diagnostic and therapeutic agents. But the primary importance of the Laboratory rests on its location which permits its scientists to observe at firsthand the natural reservoirs of diseases, their transmission in nature, and the point in a disease's natural cycle where interruption by man and his domestic animals results in spread of a disease to humans, cattle, sheep, and horses.

The Rocky Mountain Laboratory of the National Institute of Allergy and Infectious Diseases has evolved from the public health mission of a few men who, working in log cabins, an old woodshed, and an abandoned school building achieved the conquest of Rocky Mountain spotted fever. Today the Laboratory is a modern \$2 million research outpost for the Northwest and the Nation.

With continuing expansion of the service of the Rocky Mountain Laboratory to the Western States and the Nation, animal experimentation, as used in the Colorado tick fever vaccine study and for other purposes, has increased materially. The Laboratory is an unusually self-sufficient research center because of its relatively isolated location, and animal production is one of the responsibilities it must assume.

Animals are needed to study the efficacy and safety of several of the prophylactic preparations under development at the Laboratory, and are also employed to study host factors in disease and to clarify a number of other biological phenomena and livestock diseases.

The rabbit skin test developed by the Rocky Mountain Laboratory as an index of the immunity produced by an experimental tuberculosis vaccine, for example, is a thousandfold more sensitive than previously employed mouse skin tests. The new method makes possible a more critical evaluation of minute fractions of purified protective material in the vaccine studies—but rabbits are relatively large animals, and these studies, which use hundreds of them, are among those now overtaxing the Laboratory animal facilities. Validity of scientific findings is, of course, dependent upon adequate quantitation of results.

Another means of correlating vaccine effectiveness in animals has also been developed in which mice are infected intranasally by a spray of tuberculosis organisms. After 10 days, lung sections are examined, and the presence or absence of organisms is an index of infection or of successful resistance produced under controlled conditions by experimental vaccines. Results are correlated

with the other tests, providing a further check on reliability. These procedures, of course, have greatly increased the demands upon the mouse production facility.

The Rocky Mountain Laboratory, with its emphasis on diseases often involving animal hosts, makes wider use of animal experimentation and has a higher degree of technical skill in this area than many other laboratories. This is the case, for example, in work on the natural history of tickborne diseases such as the virus-caused Colorado tick fever. While laboratory mice are used in neutralization tests for diagnosing the disease, wild rodents, including ground squirrels, are trapped extensively in the search for reservoir hosts of the virus. These animals do not tax the animal production facilities of the Laboratory, but they employ space that otherwise might be improvised for animal production, although that is a makeshift and uneconomical alternative.

A large wooden building was built more than 10 years ago as a makeshift structure for mice breeding. Its inefficiency has been evident from cross infections in the mouse colonies. The building is also inadequate for present day needs.

In the face of expanding research programs, the Laboratory until recently has been able to meet its minimum needs by great and costly exertion in using makeshift and temporary wood structures for breeding animals, in adapting laboratory space for animal rearing during periods of special emergency need, or in placing special orders for shipment of larger animals across country from NIH in Bethesda.

Animals provided by outside breeders do not always meet the standards of the researchers, and the individual producers cannot economically meet the changing needs of various units of the Laboratory. Some have proved dependable, but this means of obtaining animals is very expensive in the overall. The increasing need has made these stopgap arrangements unsatisfactory. Accordingly, plans have been drawn up for adequate animal production facility.

The proposed building would be approximately 160 feet by 50 feet cement slab, single story, cinder block or tile veneer of the simplest type and design and one which would afford the most open space for the least money. Cost of the basic construction including the essential mechanical and service installations such as cage-washing facilities needed in the operation of the building is estimated at \$150,000. The utilities including heat for the building, would be supplied by connection to the existing steam and power sources of the Laboratory. The building would be constructed on land which belongs to the U.S. Government and is part of the present 19-acre plot on which the Rocky Mountain Laboratory is located.

As far as the indirect cost of overhead item is concerned, only the practical solution lies in allowing the procedure for the determination of these costs as outlined in the Bureau of the Budget Circular A-21. If overhead is computed on this formula, it will be more equitable than the present system of 15 percent and would give some flexibility to permit higher payment for indirect costs without new legislation if indirect costs continue to soar.

TRAINING FUNDS OBLIGATED

Mr. CROCKETT. In the fiscal year 1960 recommendations, the House allowance provided an increase of \$834,000 for training grants, which added to the \$1,787,000 which was recommended by the Bureau of the Budget, makes a total of \$2,621,000 available for 1960 in training grant sections of the Institute.

Well, now, actually we have this all pretty well spent or committed at this time. On the basis of the Training Grant Committee recommendations at its meetings in Atlantic City a few weeks ago, and on the basis of what we have already committed, we should end up the June Council meeting with a total of \$2,633,144 worth of training grant requests approved as against an available amount of \$2,621,000 on the basis of the House bill.

So we very definitely feel and this has been justified more by the two gentlemen on the right, that we need an additional \$2½ million, or a total of \$5 million, in order to really implement this important phase of the Institute's program. They touched on the importance of

virology in the cancer field and Dr. Alexander spoke of the importance of allergy training programs, and if we had a row of witnesses that fill this entire table, you would hear the justification of the various other training grant needs that bring this total up to \$5 million.

CONSTRUCTION ITEM

There is one other item, sir, that is outside the budget of the Institute as presented here which I did want to mention, and that is that in the House, a construction item of \$150,000 for enlarging the Rocky Mountain animal farm was for some curious reason left out of the total recommended in the House bill. This is a construction item and does not appear on this sheet but the last two or three pages of my statement, sir, are devoted to the need of restoring this construction item of \$150,000.

Senator HILL. I may say we had some very strong evidence on behalf of that item from the U.S. Public Health Service.

Mr. CROCKETT. Good. I am glad to hear that, sir. This we hope very much will be restored in the bill.

This is all that deals with this activity of the particular Institute.

NEED FOR ADDITIONAL FUNDS FOR NIH

I did want to make a general statement, though, on the need for additional funds in the total budget of the NIH, and also on the two other activities which are of particular interest to you, sir—one, the Hill-Burton, and the other the research construction bill.

I am glad to see that the House has restored the \$10 million and brought it up to \$30 million in the research construction bill.

Senator HILL. Full authorization?

Mr. CROCKETT. Full authorization. Which was perfectly splendid and I hope that will stick.

Senator HILL. Yes.

Mr. CROCKETT. As far as the Hill-Burton is concerned, we hope that will be up to maximum strength, full authorization, because this is doing an exceedingly important service to the communities everywhere.

Senator HILL. As I commented yesterday, the act requires that those funds be matched dollar for dollar for research facilities construction—1 Federal dollar and 1 non-Federal dollar. Instead of being matched by 1 non-Federal dollar, they have been matched by 4 or 5 non-Federal dollars, exactly. That has been a great stimulus.

Mr. CROCKETT. As a former member of the Health Council and this Council, I just want to say that any estimates that have been given on future financial requirements in advance of the year ahead are always low. If you will recall the Ewing report and its estimates of what was going to be needed in the next 10 years following that report in 1947-49, you can now see how low they were. I feel that the Bayne-Jones report, which is an excellent statement, a statement, as accurate as we have had and as accurate as you could get today, will probably be low and that we will be faced with a need of additional funds in all the Institutes and all the activities if we are going to go ahead in this important endeavor.

We are very appreciative of your interest, sir.

Senator HILL. Thank you.

Any questions, Senator Smith?

Senator SMITH. No.

Senator HILL. General, we certainly want to thank you.

Dr. Alexander, it is very fine to have you back with us again this year.

Dr. ALEXANDER. Thank you.

Senator HILL. Although you are professor emeritus, you look so young we would like to have that secret.

You made such a fine witness here for us this morning and such a splendid presentation, which both Senator Smith and I deeply appreciate; and you, too, Dr. Wood, from Johns Hopkins.

And Mr. Crockett.

All three of you gentlemen were most informative and most helpful and you brought us some very excellent testimony and I want you to know we feel most grateful to you.

We thank you very, very much.

Doctor, how much older is your school than Johns Hopkins?

Dr. ALEXANDER. We are much, much younger.

Senator HILL. You are one of the older schools.

Dr. ALEXANDER. Not the medical school.

Senator HILL. Not the medical school? When was your medical school——

Dr. ALEXANDER. In St. Louis.

Senator HILL. I know where it is and all that. It has an outstanding reputation.

Dr. ALEXANDER. We have had a medical school only since 1912, I believe.

Senator HILL. Just since 1912. The university itself, though, has been there quite a good many years, hasn't it?

Dr. ALEXANDER. Yes, 75 years; much longer. The medical school has a good reputation and Dr. Wood was professor of medicine there, which was one reason for it, a few years ago.

Senator HILL. As young as your school is, certainly it has a very, very outstanding reputation.

Dr. ALEXANDER. Thank you.

Senator HILL. And I think I can say the same for Johns Hopkins. It has a very, very outstanding reputation, doesn't it, Senator Smith?

Senator SMITH. That is correct.

REPUTATION OF MEDICAL SCHOOLS

Senator HILL. Both of these schools have very outstanding reputations. We had Dr. Ravdin yesterday, who comes from the University of Pennsylvania, which, of course, is our oldest medical school.

Mr. CROCKETT. Off the record.

(Discussion off the record.)

Senator HILL. Senator Smith, coming from Maine, feels what we said about Massachusetts General Hospital should have been on the record.

Mr. CROCKETT. You see, the Massachusetts General Hospital was founded when Maine was a part of Massachusetts.

Senator HILL. Gentlemen, we are certainly most grateful to you.

Mr. CROCKETT. Thank you, sir.

Senator HILL. We surely appreciate your testimony here this morning. Thank you very, very much.

FUNDS FOR MENTALLY RETARDED PERSONS

Senator HILL. Senator Robertson has received a letter from Mr. R. F. B. Steele, president of the Petersburg, Va., Savings & American Trust Co. in support of the budget estimate and the House allowance of \$1 million for expansion of teaching in education of the mentally retarded. Senator Robertson has requested that Mr. Steele's letter be included in the record. It will appear at this point.

(The letter referred to follows:)

PETERSBURG SAVINGS & AMERICAN TRUST Co.,
Petersburg, Va., June 1, 1959.

Hon. A. WILLIS ROBERTSON,
Senate Office Building, Washington, D.C.

DEAR WILLIS: It is my understanding that the House has passed the Labor, Health, Education, and Welfare appropriations bill, and that in this is included a million dollars for the special education for teachers of the mentally retarded.

I hope very much that this item will be retained in the Senate version of the bill. There is a great need for such a program, and I know this from personal experience and in working with our State association. It is, therefore, my hope that you will give favorable consideration to this matter when it comes before the Senate.

With best wishes, and thank you very much for all that you are doing.

Sincerely,

R. F. B. STEELE.

FOOD AND DRUG ADMINISTRATION

Senator HILL. Mr. Charles Wesley Dunn, of the Food Law Institute, Inc., New York City, had requested to testify on the budget estimate for the Food and Drug Administration but was unable to be here. He has addressed a letter to me on the subject, which will appear at this point in the record.

(The letter referred to follows:)

THE FOOD LAW INSTITUTE, INC.,
New York, N.Y., June 1, 1959.

Re 1960 appropriation for Food and Drug Administration.

Hon. LISTER HILL,
U.S. Senate, Senate Office Building,
Washington, D.C.

DEAR SENATOR HILL: I respectfully ask that this letter be added to the record of the hearings by the Subcommittee on Labor and Public Welfare of the Senate Committee on Appropriations, of which you are chairman; and I will appreciate your reference to it at the executive session of the subcommittee when the question of this FDA appropriation is considered, pursuant to my recent talk with your assistant (Mr. Campbell). I long since requested the privilege of testifying before the subcommittee on this appropriation; but for some accidental reason I was not informed of the time scheduled for such testimony.

Hence I now respectfully file the following substitute written statement, in brief:

(1) I write this letter as a member of the FDA Citizens Advisory Committee, which submitted its report to the Secretary of Health, Education, and Welfare in June 1955. I also write this letter as president of The Food Law Institute, a public organization to develop a better knowledge and state of this basic public law; and it is one that has become a national and international leader in the area of such law, working in close association with the FDA. I further write this letter as general counsel for the Grocery Manufacturers of America, Inc., which is the major national association of food manufacturers generally in this country; whose brands are household names.

(2) The budget increase in the 1960 FDA appropriation is \$825,000, whereas the increase recommended by the FDA Citizens Advisory Committee is approxi-

mately \$2,918,600. I suggested this latter increased amount to the House Committee on Appropriations and it made the increased amount \$2 million, whereby the 1960 FDA appropriation by that committee is \$13,800,000. Hence it thus went a considerable distance toward meeting the foregoing recommendation by the FDA Citizens Advisory Committee.

(3) I now suggest to the Senate Committee on Appropriations that the House \$2 million increase in the 1960 FDA appropriation be retained and further increased to the full approximate amount of \$2,918,600, recommended by the FDA Citizens Advisory Committee. For the FDA urgently needs this increased appropriation to meet its greatly increased and essential responsibilities in administering the Federal Food, Drug, and Cosmetic Act, which is our national pure food and drug law to fundamental importance to public health. The FDA administrative responsibilities have thus increased because of the recent basic food additives amendment to this act, for example, and also for general reasons. They include the necessary expansion in the FDA administrative organization and costs, the constant rise in our population, and the growing expansion of the regulated industries and trades. The fact is that the FDA has not received adequate annual appropriations in the past; and that the time has come when Congress should correct this serious public health situation, as the FDA Citizens Advisory Committee has responsibly recommended after a full investigation.

(4) I also suggest that the Senate Committee on Appropriations take the necessary action to complete the new FDA headquarters building in Washington, which the FDA Citizens Advisory Committee recommended and Congress has already approved in policy. But no action has yet been taken by appropriation or otherwise to finance the construction and equipment of this building, whose initial estimated cost is \$23 million or thereabouts. I understand that the architects have developed or will soon develop the plans, designs, and actual costs of this building; and the committee should make the required appropriation accordingly. It is of the highest importance that the FDA thus be provided with the facilities which it also urgently needs.

(5) It is my considered opinion, based on a related survey, that the FDA is by far the best national organization in the free world today for the due administration of a national pure food and drug law. And it is clear that Congress should provide it with the appropriations and facilities which it unquestionably needs to effectively meet the increased and essential administrative responsibilities that Congress has placed on it.

Respectfully submitted.

CHARLES WESLEY DUNN.

STATEMENT OF SENATORS HUMPHREY AND MCCARTHY

Senator HILL. Senator Humphrey has requested that his statement on behalf of himself and Senator McCarthy in support of an increase in the appropriations for the research programs of the National Institutes of Health be included in the record. The Senator's statement will appear at this point.

(The statement referred to follows:)

STATEMENT OF SENATOR HUBERT H. HUMPHREY ON BEHALF OF HIMSELF AND SENATOR EUGENE MCCARTHY IN SUPPORT OF AN INCREASE IN THE APPROPRIATIONS FOR NIH RESEARCH PROGRAMS

Mr. Chairman, we can have nothing but praise for the outstanding work conducted by the National Institutes of Health of the U.S. Public Health Service through its research programs throughout the country. This work is part of a continuing all-out war, through research on cancer, mental illness, heart illness, dental disorders, arthritis and metabolic disease, allergy and infectious disease, and neurology and blindness.

It is my opinion that the accomplishments which have been made in medical research justifies the continuance of NIH programs at an accelerated pace. This must be done now, without hesitation, if we are to solve the riddles of the various afflictions and diseases which are constantly crippling and snuffing out the lives of thousands of individuals, consequently slashing the wrists of the Nation's productive capacity.

The administration is requesting only \$294,279,000 for the operation of the eight NIH research programs in fiscal 1960. This is roughly the same financial

level on which the programs are operating this fiscal year. This request is sorely lacking in realism when considered in light of the tremendous accomplishments made in the field of medical research. Fundamental research and applied research have resulted in the things which money cannot buy. I am speaking of the reduction in disability, lengthening productive life, good health and happiness, and high morale.

This request obviously does not take into account increases in prices and in the national population, and certainly does not consider continued improvements and progress in medical research. This is evident in the fact that the justifications offered in support of the budget recommendations are so futile.

The only concrete justification given is that the amount requested—despite the fact that it will not adequately maintain NIH programs—would be in tune with the administration's stand on inflation and on balancing the budget.

I respectfully submit, Mr. Chairman, that it behooves all of us to constantly bear in mind that the health and welfare of the American people is a primary object of our Government. The Nation itself is only stable and secure to the extent that its citizens are provided for.

Despite improvements in cancer control through surgery and radiation, we are still short of that breakthrough that will free mankind from this terrible disease. The death of John Foster Dulles serves to dramatize just how much further there is to go before we can bring this dread scourge of mankind under control.

The struggle against disease is not limited by national boundaries and ideologies. Indeed all nations are challenged to mobilize their resources against disease. As you know, during my study tour of Europe last winter with my subcommittee on International Health, I secured agreement from even the Soviet Premier to participate with the United States in a worldwide undertaking to pool medical research in the struggle against cancer and other dread diseases.

We are going to have such a worldwide onslaught on pain and disease, during the International Health Year—following the passage by Congress of my resolution calling for American leadership to establish such a year.

I am saddened by the fact that the administration talks boldly about the need for greater medical research but does nothing about it. It is my understanding that several months ago NIH officials informed the Department of Health, Education, and Welfare that at least \$351,279,000 was needed to operate NIH programs in the coming fiscal year. This is \$57 million more than what was requested but is by no means adequate.

It is my hope that the committee will recommend an appropriation of \$478 million for medical research under NIH. This is the amount suggested by 16 of the Nation's leading medical scientists.

I submit that this would be a realistic appropriation which could be economically used by NIH in seeking the causes and cures of mankind's dread diseases.

I am indeed grateful to you, Mr. Chairman, and to the committee for allowing me this opportunity.

(Whereupon, at 12:38 p.m., Thursday, May 28, 1959, the hearing was concluded.)

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